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THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly

AMERICAN ENGINEERS BEING TRAINED FOR ACTUAL COMBAT ON THE BATTLEFIELD: THE EQUIPMENT CARRIED BY U.S. "COMBAT ENGINEERS" DURING THEIR TRAINING IN BRITAIN INCLUDES A PORTABLE WIRELESS SET AND A COLLAPSIBLE AERIAL FOR RADIO TELEPHONY

Recently, a demonstration by U.S. Engineers was staged in this country in order to show the methods used in the advanced stages of the training of their "Combat Engineers." The Exercise was supported by infantry: during its course the Engineers advanced through mine-fields, anti-tank ditches, barbed-wire obstacles, etc. They had been given the task of capturing and destroying a typical German "hedgehog" position: flame-throwers, pole charges, grenades, rifle fire and bayonets were all used. During the demonstration the method whereby the various units keep in touch in the field was also shown: certain of the men carry a special radio set on their chest: by means of this, and of a collapsible aerial and earth mast (carried by hand), communication is maintained by means of radio telephony, the soldier speaking direct into a mouthpiece built into the set, as shown above. The earphones are attached to the helmet

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A WAR NEWSLETTER —No. 193

1, NEW OXFORD STREET, W.C.1.

Tunis, Bizerta and "Mare Nostrum."—It came with a rush. May it augur a like end of the World War! I think all concerned on the Allied side were taken by surprise. (All concerned on the other side were taken by exhaustion and attrition.) True, weeks ago Alexander spoke with perfect confidence that the conclusion was foregone, but even he, and only on the eve of the fall of Bizerta and Tunis, hedged on the question of *time*. And very rightly. For he may still be right. Pockets of resistance may take time to liquidate. But the fall of Tunis and Bizerta means that the essence of the "job to be done" is done. The Narrows are more than half-free and the bottle-neck of the Mediterranean is vitally enlarged. *Mare nostrum* ours to exploit. What are the observations of an amateur? First, that the armchair critics, the students of war, and so forth, set more store by the strength of Bizerta than by the logic of exhaustion of personnel and attrition in the flow of reserves and material from Sicily. Bizerta fell because the Axis were exhausted and starved of supply. Defences alone are not enough against the handicaps of vulnerable supply lines and air inferiority. The Fleet and the Air Forces blasted a path for the supreme courage and endurance of the land troops to a position which made an unbroken fortress no longer tenable by the enemy. Land power, without dominant air power, can achieve little to-day against an entrenched enemy. Safe lines of supply are more important to-day than ever before, when a land army drinks in gallons where once it drank in pints, and eats in tons instead of pounds. And guns and bombs combined continuously sap the enemy's morale more swiftly than the heaviest artillery barrages of 1917-18. And still, as of old, the greenest bay leaf goes to the "incomparable" infantry who have slogged it from Alamein, superbly led, superbly supported by Fleet and Air Force, by Q, by A and by I, to the goal of Tunis and the winning of the Mediterranean.

Flying Accidents.—If one compiled a list of the senior officers of all combatants who have been killed in flying accidents during the war, in the course of flights on their "lawful occasions," the reading of the list would be a shock and an eye-opener. Such "accidents" have not been the result of enemy action, so far as we know; they have been the mischances of ordinary flying. We have only recently come to think that, as a result of the stepping-up of scientific invention to secure maximum airworthiness for aircraft under the worst that Nature and the enemy can achieve, flying under "peace" conditions has become the safest of all methods of transport. The surprising, and, indeed, appalling, toll of keymen taken by flying accidents under "normal" conditions during this war may well cause us to modify our opinions of the safety of flying. The air-liner or big bomber has become the ordinary "station-bus" for Statesmen and high officers in their journeys between continents and over oceans, and the statistics seem to show that trans-ocean flights are much safer than trans-continental. It may be that an examination of these statistics in detail would reveal contributory causes unsuspected by the public, sometimes, perhaps, enemy action, sabotage, or neglect of routine precautions more than ever essential in the transport of keymen. We do not know those details. The figures of such losses remain, and are arresting enough. It would be safe to assert that a hundred high-ranking officers have lost their lives through accidents during "normal" flights.

A Time for Greatness.—I like to receive confirmation of views I have expressed in print, from a "best-seller." After listening to the manly voice of the author of *A Time for Greatness* over the air, I enjoyed the discovery that we share opinions and also methods of expressing them. We both appear to agree that now is the time for the English-speaking and other Allied nations to begin to practise and acquire those qualities of selflessness, greatness and all Christian and civic virtues without which victory in war will be fool's-capped in peace and the years to follow will once more be "years between wars" and another hell and beastliness. I was glad that he is an American. That affords a cross-check. He knows his own people better than I; I perhaps may know more of the British. That both these great peoples have to grow greater and stay great is beyond all question. In America, I fancy, there are still millions living "remote from war"—that is, untouched by its physical dangers and, *ergo*, still not cast adrift from the shackles or barnacles of between-war failings, which comprise narrow political views, selfish individual ambitions and a score more negations of Christian and civic morality. In Britain, a much higher proportion of the population has been touched by the physical dangers of war, and that has jolted some of the barnacles off. *But not by any means permanently*. Given a lull, a period of relief, a spot of success, a return to confidence, back come the 'tween-war barnacles, the selfishness, the class bitterness, the petty and the base. The stress and danger of war, brought home to a man, do indeed jolt him out of narrow selfishness and shake off some of his shackles. But where our planners go wrong is in the assumption that the shackles are shaken off permanently. These planners *will* not see the fearful danger and seduction of *resumed* security, of a short period of relaxing. They won't learn the lessons of November-December 1918. You can't turn on these virtues like a tap. You must practise now, if you are to hold them. And then, another thing . . . *what* virtues? May you pick and choose, or must you shoulder the whole catalogue from the Sermon on the Mount? Our bishops think you may pick and choose virtues possible in wartime—honesty, sexual morality—and may tactfully keep silence on such cardinal items of Christianity as forgiveness and pity (as being beyond the compass of men engaged in a death struggle). This view may be politic, may be realistic, but is it whole-hog Christianity? You must settle it for yourself. I make the gesture of Pilate. What is truth? Where does it hide its head in war?

The Coming Men?—It is natural at all times to look round for the "coming men" in politics. We shall one day return to party politics, since our national character or genius thrives best under such methods, and, indeed, there is no alternative except in temporary emergency. But under what labels the "parties" will operate, and when the day of return will dawn, I don't pretend to know. The present labels seem to me to be quite meaningless, and the end of the war not in sight or distantly signalled. But in war or peace, and under party or coalition Government, "coming men" are always anxiously to be looked for. For "Death is common to all," and Amurath must to Amurath succeed. I take it as clear that, in British politics, to make a leader from any party departmental efficiency is not enough. A "coming man" must give proof of other qualities beside administrative soundness. Personality or character stands above all else, and experience of House of Commons practice and procedure (which includes also skill and tact in handling parliamentary personalities) is an essential quality in political leadership. To-day, I should say the House of Commons is a dull place and meanders along a pretty drab and dreary canal, lacking high spots of interest. It is hard to spot coming men on the Front Bench, and hardest of all among the Conservative ranks. Mr. Eden certainly possesses some of the essential qualities. Several others have shown administrative ability. Indeed, one of the most remarkable phenomena in the politics of this war is the fact that so many of the departmental chiefs in the Government have held down their jobs so long and so successfully. If you recall the non-stop general post and perpetual ungumming of the Lloyd George administration, you might declare that coming men were as common as butterflies in May. But when it comes to cutting ice in the House, when the test is character and personality and getting these across, then it's another thing. The Rolands of Labour rather outshine the Olivers of Conservatism in the House itself. After the essential Churchill (who has all the necessary qualities of leadership save only immortality), Mr. Bevin and Mr. Morrison stand streets ahead of any others of any party in the Front Bench, and Mr. Morrison has the additional merit of being a very clever parliamentarian. How much hold on, and influence with, his own party he may possess, I do not know. His career may be watched with interest, and in a reorientation of parties he might well find himself leading a middle course. There are Liberals . . . and what the Premier conceives to be "mushroom-growth" parties, and older "three-men-and-a-boy" parties. And all these contain some sound men and good fellows, as well as cranks and stunt-merchants. But wherever you look, your search for coming men is like to be disappointing just now.

A Useful Three-Year-Old.—Home Guard (by Necessity out of Dunkirk) is a useful three-year-old. Bred by the National Stud, it was trained by Everyman and entered for the Classic Stakes. If it has not won a number of classic races, it has certainly not lost money to its owners. I have known the animal from birth and I admire its qualities. Not being a racing man, I will drop the racing metaphor to avoid pitfalls of ignorance. Looking back on these three years of zeal and disappointment, order and counter-order, advance and setback, muddled thinking and constructive progress, promise and delays, hope and hopes deferred, I take a realistic and not a disillusioned view of this Home Guard business. In its time it has been a paper army, the world's greatest bluff, a gorgeous propaganda device, a skeleton force, a half-trained, half-baked, Heath Robinson defence force. To-day it is a force to be reckoned with; by and large, a not despicable National Guard. It has been a nursery for the Regular Army, has taken over a number of vital defence duties, from the defence of aerodromes and the manning of A.-A. batteries to close and nightly co-operation with the C.D. force. It should be the most democratic army in our history, comparable to Cromwell's model. Sometimes I think it still is so. Sometimes I doubt. I don't underrate the zeal and efforts of its directors. In the main, they have done their best. If there is one thing that strikes me as ill-considered, the very contradiction of the democratic ideal, it is in the matter of seasonal, complimentary honours and awards. There should have been none such, or they should have been awarded bottom upwards, not top downwards. Where Home Guards have shown courage and initiative "in the field" of Britain, they have been decorated punctually, whatever their rank. That is right and most satisfactory. But a half-yearly distribution of complimentary O.B.E.s, etc., to Zone Commanders and Battalion Commanders was a return to an outworn military shibboleth, unsuited to the Home Guard and contradicting its spirit. But it's a small point, not dipped in venom.

THE OLD STAGER

THE COMMANDER-IN-CHIEF OF THE CANADIAN NORTH-WEST ATLANTIC: Rear-Admiral L. W. Murray, of the Royal Canadian Navy, whose appointment has been made to assist the new Atlantic Convoy plan. His headquarters will remain at Halifax in Nova Scotia. Rear-Admiral Murray was Commanding Officer, Atlantic Coast: prior to that he was Flag Officer, Newfoundland Forces

THE END COMES IN TUNISIA

The Break-up of the Axis Armies and the retirement into the Bon Peninsula

THE ENTRY INTO TUNIS AND BIZERTA BY THE ALLIED ARMIES ON MAY 7, 1943. How the break-through was accomplished after the mountain masses guarding the two main cities had been penetrated by the First Army and the U.S. forces. The last foothold of the beaten German armies, on the Cape Bon Peninsula, is indicated by a lighter tone—*Drawing by E. G. Lambert*

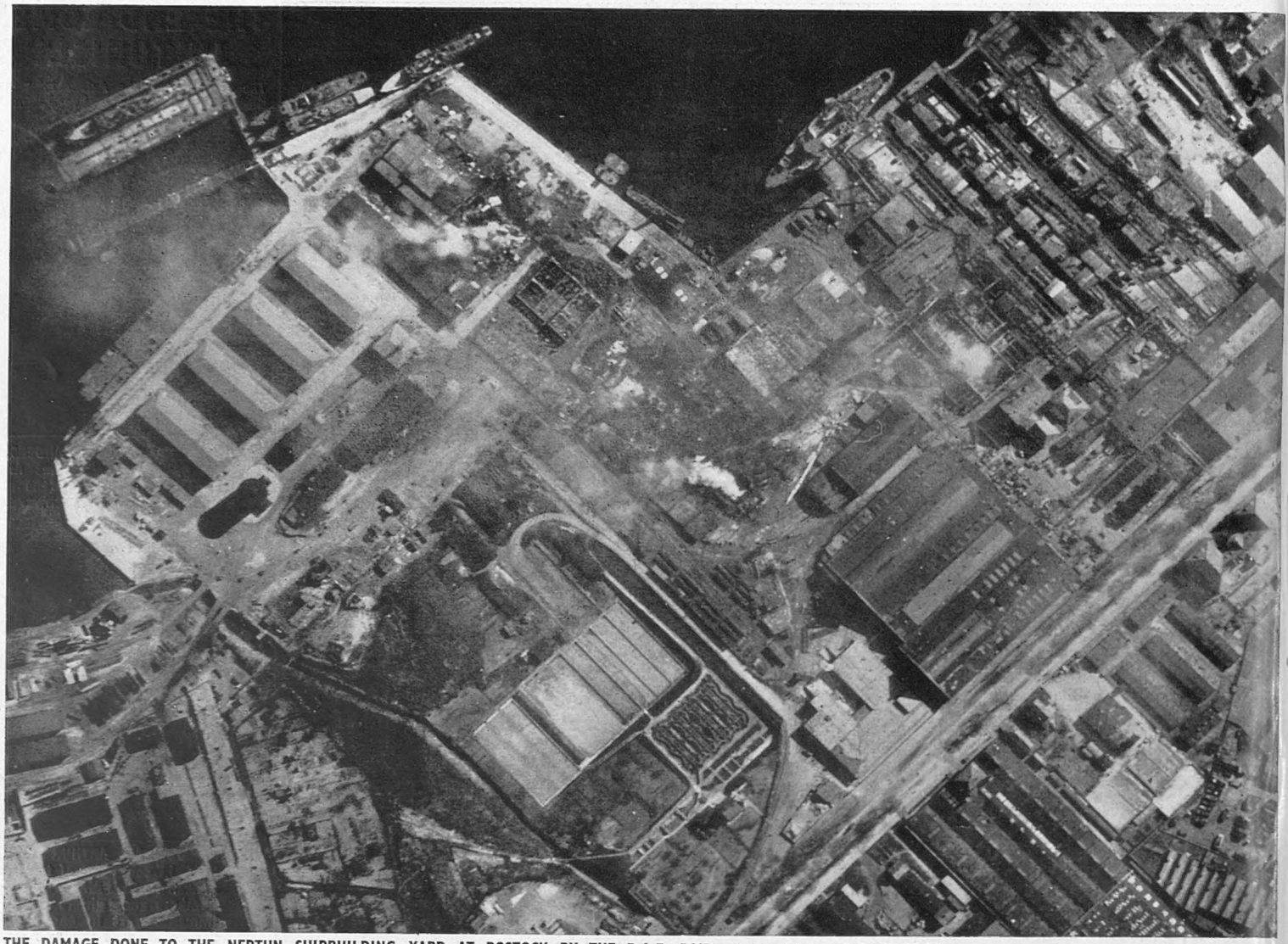
LIEUT.-GENERAL K. A. N. ANDERSON, the C.-in-C. of the First Army whose troops covered the area from Goubellat northwards

AIR MARSHAL SIR ARTHUR CONINGHAM, in command of the North African Tactical Air Forces, whose bombers and fighters played an immense part in encompassing the downfall of the Axis armies

On left—This drawing shows the area from the coast to Pont du Fahs on the west; then up through Goubellat and Medjez-el-Bab to Bizerta. The latter town and Tunis both fell on the 7th; Zaghouan fell on the following day. The remaining German forces in North Africa (apart from a few isolated pockets now being liquidated by the First and Eighth Armies) have withdrawn into the Cape Bon Peninsula. Their destruction can now only be a matter of time

R.A.F. BOSTONS FLYING OVER THE RUGGED TUNISIAN MOUNTAINS on their way to attack Axis airfields. These aircraft of the Tactical Force battered at the Germans without cessation, over a period of many weeks

THE ROCKY GORGES OF THE WILD TUNISIAN MOUNTAIN COUNTRY are clearly shown as the Bostons fly over them on a mission behind the enemy lines: In a record number of sorties, the Tactical Air Force hurled the full power of its shuttle service into action to coincide with the offensive of the Allied land forces in North Africa. In one instance four separate formations of bombers were over one enemy airfield at the same time. They all reached their targets within 20 minutes. U.S. and British A.20 Bostons and B.25 Mitchells kept up an almost ceaseless attack on the enemy's main Tunisian airfields, each formation shuttling to and from its base many times during each day



THE DAMAGE DONE TO THE NEPTUN SHIPBUILDING YARD AT ROSTOCK BY THE R.A.F. RAID on the night of April 20-21. Fires are still burning amongst 6½ acres of workshops the day following the attack

Pictures taken during photographic reconnaissance a few hours after Bomber Command's heavy attack at Rostock show that, on the night of April 20-21, considerable further damage was caused to the already badly battered German U-boat and shipbuilding centre on the Baltic coast. Approximately six and a half acres of workshops in the Neptun Shipbuilding Yards were destroyed by fire on this occasion, and these were still burning at the time the above picture was taken. On the same night as this raid on Rostock, other German cities were also attacked—Stettin and Berlin by the R.A.F., and Tilsit by the Red Air Force. The Rostock attack was made by Stirlings

ATTACK FROM THE AIR

Pictures which Show the Damage at Rostock, Naples and Palermo

—Wrought by Bombers of the R.A.F. and of the U.S. Air Forces

U.S. FLYING FORTRESSES TAKE A HUGE BITE OUT OF NAPLES : This reconnaissance picture of the battered waterfront shows : 1—A great hole 340 ft. long on the Victor Emmanuel Quay ; 2—Near this great hole, the stern of a sunk merchant vessel, destroyed by a bomb explosion, sticking up out of the water. The harbour of Naples, one of the supply bases for the Axis forces in North Africa, has been pounded time after time during recent weeks by Flying Fortresses of the U.S. Army Air Forces based in Tunisia

On March 22 B17 Flying Fortresses carried out an attack on Palermo Harbour, in Sicily. The Italians declared that "twenty four-engined planes" were concerned in this raid. The picture on the right shows the damage they inflicted. The half-moon section blasted out of the Centre Quay is 350 ft. wide and 150 ft. deep. A merchant vessel, 400 ft. in length, beside the same quay is badly damaged. Two sailing vessels, 120 ft. long, were blown out of the water and now rest on the quay to the right. A warehouse on this same quay is in ruins ; and a 500-ft. long tanker just inside the Outer Jetty is badly damaged. The figures in the accompanying photograph indicate the following :

1—The hole in the Quay, 350 ft. wide and 150 ft. deep, caused by the blowing up of a ship carrying ammunition.

2—The two ships, of about 150 tons each, blown up on to the Quay.

3—The large merchant vessel damaged.

4—A medium-sized vessel sunk.

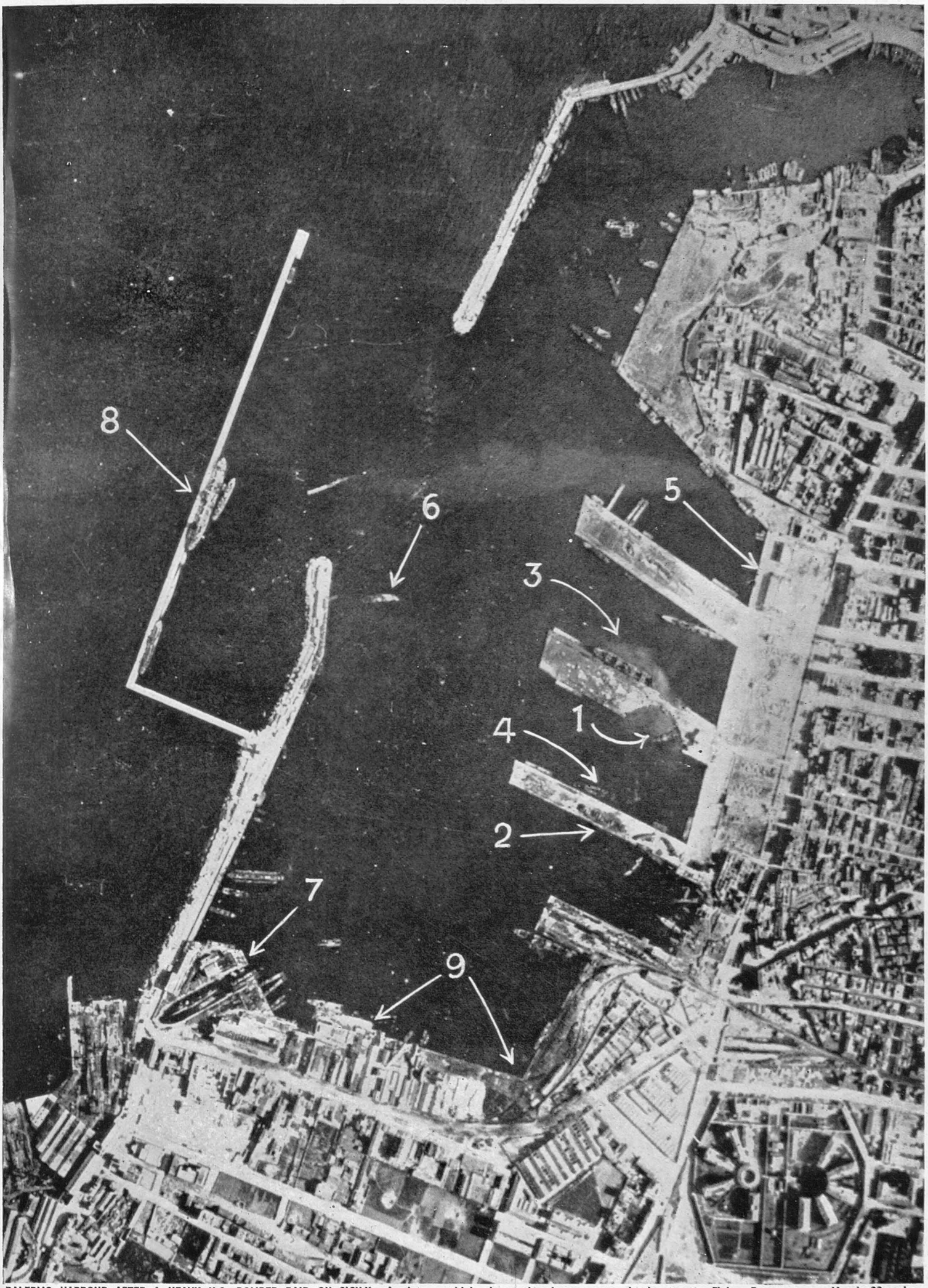
5—Seaplane hangar damaged.

6—A medium-sized merchant vessel, carrying a deck cargo of motor vehicles, sunk.

7—A destroyer sunk in its dry-dock, rendering it useless.

8—A tanker of 10,000 tons damaged by aerial torpedo attack.

9—Extensive damage to workshops and two oil-tanks destroyed



PALERMO HARBOUR AFTER A HEAVY U.S. BOMBER RAID ON SICILY: A picture which shows the damage wrought by twenty Flying Fortresses on March 22, when all the Axis supply bases on the Italian mainland and around the island of Sicily were being subjected to heavy air attack by bombers and fighters from North Africa and from Malta. On May 9 it was announced that this same Harbour has been attacked by no fewer than 400 American aircraft, and that "very great damage" had been wrought amongst the docks and factory areas

THE STATE OF FRANCE TO-DAY

What is Actually Going On in that Unhappy Country, Whose Leader is Now Definitely Bound to the German War Machine

Described by FERDINAND TUOHY

IN recent months French news has been dominated by the inability to pull together of Generals de Gaulle and Giraud, and the fact has tended to put in shadow the profound change that has been wrought in France herself in that time.

If the two soldiers can soon be brought to a "sacred union," this is bound to have a healing and fortifying effect on the French people as they are currently being tormented. At the same time, it is just possible that the lack of understanding is bound up too much with the future.

For example, has the difference prevented the Fighting French from carrying on hostilities wherever they have been able to do so, as since June 1940? Has it prevented the French troops under Giraud in North Africa from fighting successfully in Tunisia? True enough, there are obvious danger signs ahead. A serious consequence of a sustained breach might appear when French troops of liberation landed in France. Giraud, who does not like the late French democracy, aims, so he tells us, to lead his troops to Metz. Whereas de Gaulle, who wishes to improve on the late French democracy, would no doubt be attracted by Paris. The Generals' roads might diverge. But let us pass from *might* to the hard present.

While others have been discussing the state of Hitler's health, that evil destroyer has been bearing down with his full weight on the French people. He seems to have had three objectives: to get French men and women into German war factories; to clear France of all who might aid the Allies in an invasion; and in the last analysis to force a number of Frenchmen to fight alongside the *Wehrmacht*. Laval has taken his orders at source and (in an address not printed in English) shields himself behind the fear of Communism (an excuse he can resurrect in the future) in order to declare without circumlocution that:

"I wish for a German victory with all my strength because an American victory would mean the triumph of the Soviets and the Jews, and now I possess the requisite power to break all resistance. I am going to arrest without consideration for age, suffering or persons. The country has got to choose between my policy and Communism. Those who differ can no longer live here. This is another war of religion. Nothing shall swerve me. I shall walk like a somnambulist towards the goal I have set. You tell me public opinion doesn't understand me. I don't give *that* for public opinion, which thinks only of its stomach! It doesn't need to be consulted but to be ordered."

This Laval, we must remember, has behind him the German Army of Occupation, divers French police and militia, and even the Italian troops who have taken over the left bank of the Rhone from Marseilles up to near Lyons. Laval has apparently agreed to Nice and Corsica going to Italy, also to Alsace-Lorraine going to Germany. In other words, he is going all out, committed to the throat, and he will do everything he possibly can to extract from the French all that Hitler requires from them. It would be foolish to put his outburst down to Gallic fireworks. There was a time when Vichy sent up a lot of fireworks, but the present is an interlude of grim reality.

The very face of France is changing under the immense movements of the population. Take the coast. From Dunkirk to Hendaye the coastal areas are being transformed into a glacis largely bereft of inhabitants. A small port like Dieppe—normal figure, 28,000—has been losing 500 people a day and is now down to some 5,000, who are on essential work of local upkeep. Havre is down to 50,000—less than a third—the majority living outside, by night. Brest may count 40,000 of a former 120,000. Places like Lorient, St. Nazaire, St. Malo and La Rochelle are beginning to look like cities of the dead. Practically no more women or children. Great centres for the reception of evacuees have been created in the middle of France, notably round Guéret.

In the meantime an ever-increasing army of youths and men are "on the run" from the Laval mobilisation orders, which aim at collecting 800,000 males for auxiliary service with the German Army. The real aim is stated to be to get this huge mass of men sorted out into encampments, whence they will work on defences—and be mown down if they try to connect in any way with Allied invasion attempts. The Germans fear that there exists an army of irregulars ready to unite with a sea- and air-borne invasion, and they are determined to emasculate it in advance. It is as if Hitler had been reading the judgment of Prince Frederick Charles of Prussia, on the battlefield of Beaune, in November 1870:

"The francs-tireurs, aided by the country, have done the French good service. Now I am reduced to a waiting attitude. There is for a leader nothing more oppressive than a situation that is not clear, nothing more trying than bands of armed irregular troops, aided by the population and the nature of the country, and relying for support on a strong army in the neighbourhood." Hitler does not intend that we shall get in first with the "strong army." The conditions are totally different now from seventy-three years ago; modern arms, mechanised forces and aircraft can keep guerillas under; but it is as if the spectre of that "People's War" which the French fought for five months in 1870-71 were in the minds of the Germans.

When Paris was besieged in September 1870 here was what remained in the rest of France: twelve battalions of infantry, nine regiments of cavalry, one battery of artillery. But the Germans had done nothing to round up civilians, many of whom had had military training, and these, with their women, organised a guerilla defence that won several battles, thanks to foreknowledge of the whereabouts of stores and material.

Alas, it has all been remembered by the Prussians of to-day. . . .

The round-ups in France are being greatly aided by French Fascist police and militia, who see their own skins as dependent on the results they achieve. "Our most urgent need," runs a proclamation, "is to organise against the insurrection that will follow an Allied invasion. Nobody doubts that the insurgents will seek to profit in the first hours by a veritable St. Bartholomew of European revolutionaries and National-Socialist patriots. To die well, we must not die vainly. We must not be trapped. Alone the Militia can prevent an insurrection, but if it fails to do so, then it must at least resist."

As Frenchmen are taken off to "Greater Germany" at the rate, it is said, of 300,000 a month, Axis troops have been pouring into France. This is particularly evident along the Mediterranean, where the Fourth Italian Army has taken over between Mentone and Toulon. This is an anti-invasion army supported by German units, and by French anti-aircraft crews. Since the war turned right against them, the Italians, as if in desperation, have been imposing themselves on the Southern French. Previously they had lain low.

Whatever the true nature of the German strength, it has been heavily augmented from the eighteen or twenty divisions reported in France this time last year. One estimate places the present Nazi effectives as high as fifty divisions in or immediately around France.

France is really cut into five different portions at the present moment. The Northern Departments are annexed to Germany *via* Belgium. Laval has just ceded Alsace-Lorraine. The old Occupied Zone is under Stuelpnagel and Co. Vichy rules for the Germans in the south. And the Italians have annexed the Riviera, Savoy and adjacent lands. In all France's history, there was never anything to approach the current picture that she presents.

And then, across the Rhine, is arising an ever-growing "Exile France." It began three years ago with 1,400,000 prisoners. A handful has been exchanged against skilled workers sent from France (one prisoner for ten skilled men); far more have died in prisoners' camps, chiefly of tuberculosis or decay. But of late their ranks have been taken by the newcomers, sent as forced labour from civilian France, and there are now nearer 2,000,000 French outside France, chiefly males between eighteen and forty-five. That is a *sixth* France that will have to be reunited with the Motherland one day! There is no doubt that Hitler is out to demolish France by a series of vast slashes at her demographic picture.

Hitler's hopes of French recruits for fighting purposes against Russia are stated to repose mainly on his prisoners' camps in Germany, and a new job has been given the traitor Doriot—that of going round the French camps, as the Führer's representative, hunting out "volunteers." The chief bribe held up is that the victims will be reunited with their wives and families, either in Germany or on "war leave" to France. Well may we ponder some of the temptations that are held up to the French. . . .

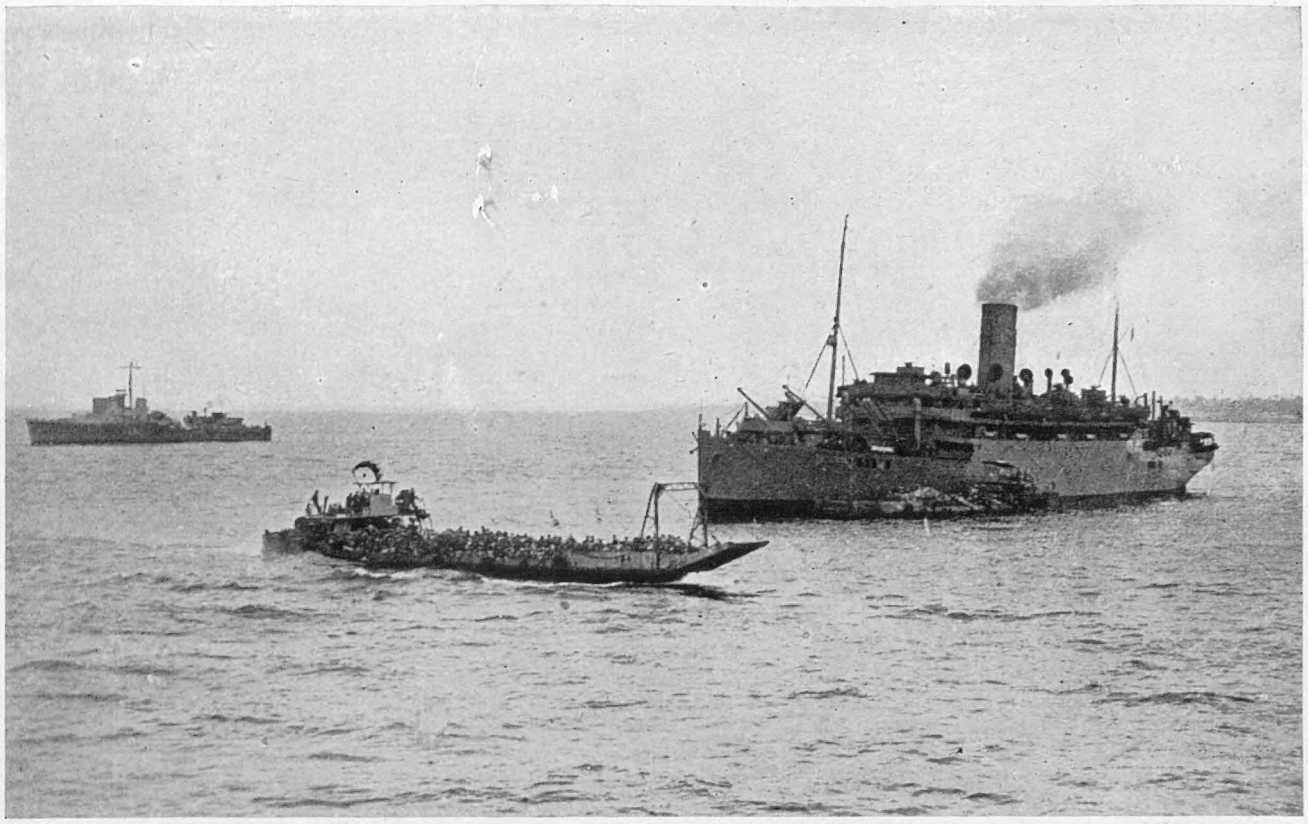
A further weakening of the nation is being exerted by the arrest of men—and women—who are reported by local police spies as displaying spirit and refusal to collaborate. Laval is now putting thousands of the remaining local personalities of the country behind barbed wire. Hostages for to-morrow.

To sum matters up, there can be no denial that France's ability to help her would-be deliverers has been grievously lessened since the New Year. With each ensuing month it will be lessened still more, despite all the courage and resource shown by "contacts" flying from this country and by Frenchmen "on the run" in their native hills and woods, fed from night to night by neighbouring peasants.

What a task lies ahead, *mes Généraux*! In the words of Mr. Eden: "For us the full restoration of France as a Great Power is not only a declared war aim and the fulfilment of a pledge made to a sister-nation, but also a practical necessity if post-war reconstruction is to be undertaken within the framework of that traditional civilisation which is our common heritage."

THE EVACUATION OF THE CIVIL POPULATION FROM PARTS OF THE HARBOUR AT MARSEILLES, so that the Germans might strengthen the "soft under-belly" of Europe

According to a German description accompanying this picture, these "criminals and suspects" were arrested in Marseilles during a night raid while the police barricaded the Harbour area. The inhabitants, summoned from their houses by means of loud-speakers, collected with their hand luggage on the quayside and were then transferred to camps. But, obviously, the reason for this round-up was different from that given by the Germans. These old men, women and children don't look like criminals. Marseilles, however, is part of the Axis "soft under-belly," which stretches along the Mediterranean coast: and the Germans have brutally carried out the evacuation of the civilian population to get rid of elements upon which they could not rely. In the picture above, the man on the right is a German police officer: the other uniformed men are French Harbour Gendarmerie who superintended the forced evacuation



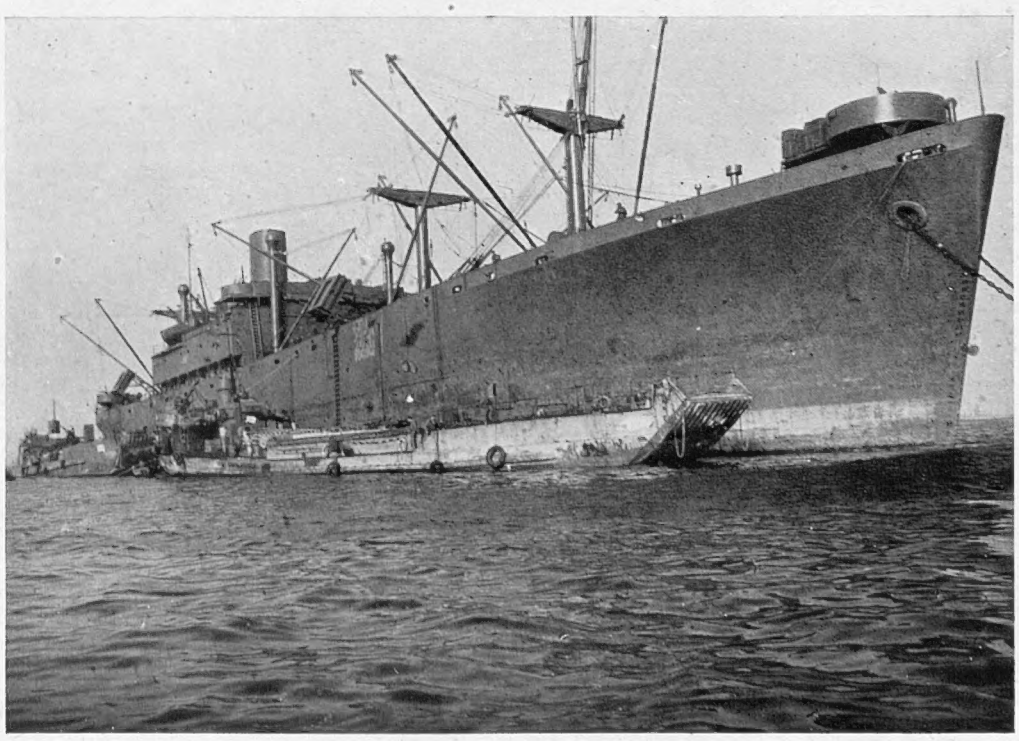
A BIG LANDING-BARGE OF A NEW TYPE bringing a great number of British soldiers ashore at Tripoli. The men are packed shoulder to shoulder, to be landed at a port which the Axis thought they had wrecked completely. A destroyer stands on guard over transport and landing vessels

PREPARING for the NEXT STAGE ?

British Troops Land at the Port of Tripoli

Now that the Afrika Korps have been virtually expelled from the whole of Tunisia, great events are obviously impending at other places within the Mediterranean area. The North African ports are now hives of activity, with British troops arriving in Convoy and with stores being landed at ports which, until recently, were in German and Italian hands, such as Tripoli. Recently the enemy radio has been greatly concerned with the movements of shipping at Gibraltar and in the Western Mediterranean generally: they are evidently in doubt as to where the next blow is to fall. The new high peak in Allied activity portends a disclosure to the enemy soon!

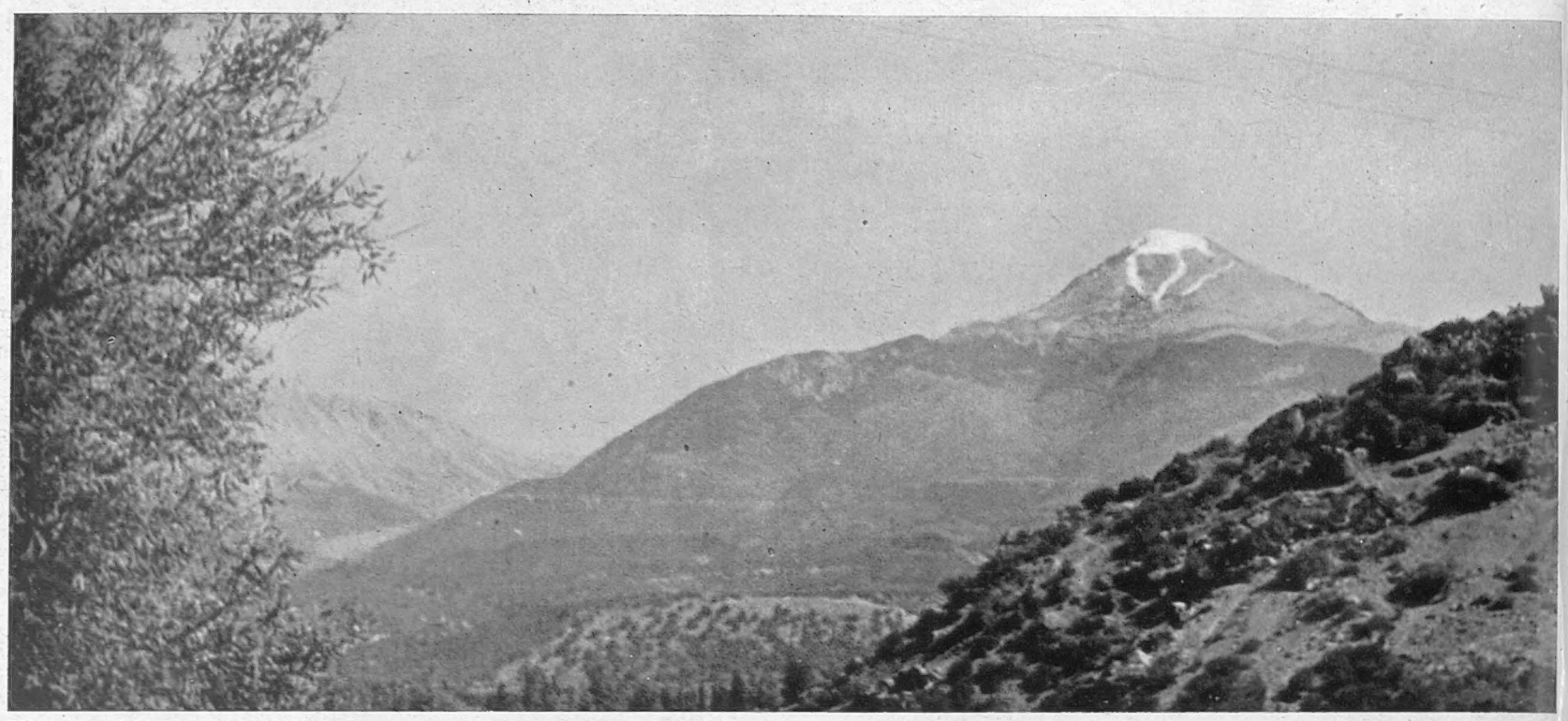
THE FIRST PICTURE TO SHOW OUR NEW TYPE OF SUPER-LANDING-CRAFT. There must be very many scores of soldiers on this one vessel. The front portion of the craft can be lowered to facilitate the landing operation. In the background is the Tripoli waterfront



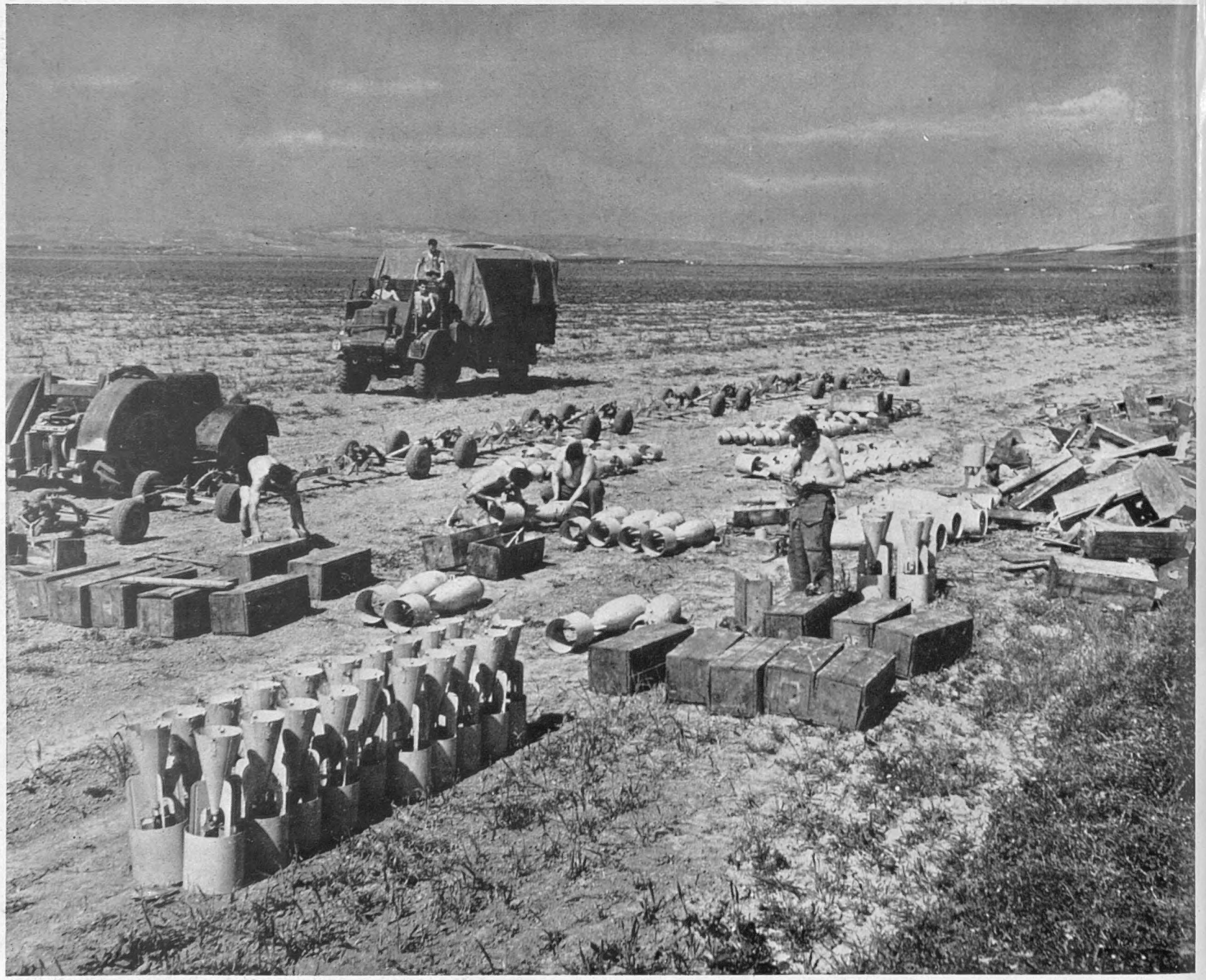
TANK LANDING-CRAFT UNLOADING STORES FOR THE EIGHTH ARMY from a "Liberty" ship in a North African harbour. The landing-craft are self-propelled and of a great capacity. Note the outlines of the new type of cargo-carrying "Liberty" ship

SOUTH AFRICAN BASUTOS UNLOADING AMMUNITION from a tug in Tripoli Harbour. They have constructed an endless roller chain for the quicker handling of the heavy quantity of supplies being brought ashore

From the FIGHTING AREAS in NORTH AFRICA—The Latest Official Photographs



THIS IS "LONGSTOP HILL," THE FORMIDABLE AXIS STRONG-POINT WHICH IS NOW IN ALLIED HANDS. It was one of the most important obstacles confronting the First Army in Central Tunisia; despite a desperate resistance, it eventually fell to our assaults on April 26 (a drawing and other photographs are given on pages 206-7 of this issue). The picture above was taken from some miles away, when Longstop was still in Axis hands and whilst snow still lay on its summit. The hill was considered to be "impregnable," according to the statements of German prisoners now in our hands. As it commanded the Bizerta plainlands, its possession was regarded as of the utmost importance by the enemy, and its loss must have been felt keenly



THE OPEN-AIR SCENE AT A FORWARD AERODROME from which waves of bombers go over to attack the Axis positions in Tunisia. Bombs of all sizes are brought to this point by lorries from the Allied bases, and ammunition for the bombers' machine- and cannon-guns. The aerodrome is just a piece of flat ground, levelled off where necessary for flying. In the background are the hills and gorges amidst which our infantry and tanks have been at work chasing the Axis out of their strong-points in the northern tip of the "strong box"

AIR TRANSPORT FOR THE CASUALTIES IN THE AFRICAN FIGHTING: In a few hours these wounded men will be in comfortable hospitals some hundreds of miles from the battlefield. Scores of them can be conveyed in each of the big aircraft

The Western Desert Air Transport Service has carried out valuable work in the North African campaign. They facilitated every stage of the advance, bringing up a constant stream of troops and supplies. The Air Transport Service uses several types of aircraft, from Bombays and medium transports such as Hudsons up to the giant Douglas D.C.3s. Pilots and crews of these big aircraft are briefed like bomber crews, and they operate to a carefully prepared schedule. Their work takes them to within a few miles of the enemy's positions. Aircraft which have flown fresh troops forward often return with the wounded, and some of the planes are specially fitted to take stretcher cases. It is a distinctly hazardous business, but the Air Transport always fulfils its unofficial motto—"We deliver the goods"!

A BURIAL SERVICE ON THE BATTLEFIELD. The scene at the interment of Brigadier F. H. Kisch, of the Eighth Army, who was killed in the advance towards Sousse

Brigadier Kisch was the Eighth Army's first Chief Engineer: it was he who was largely responsible for the great engineering feat which brought the water of the River Nile over hundreds of miles to a point near the Libyan Desert in time to allow the offensive to start on the appointed date. During the advance towards Sousse, the Brigadier was in the most advanced area, dealing, with other Sappers, with an enemy minefield, when two mines exploded, killing him and two brother-officers. Shortly after his death, an Army chaplain held a burial service on the road to Sousse, where the impressive picture reproduced above was taken

"TWO WARS ARE BEING FOUGHT IN THE ATLANTIC": ONE IS AGAINST THE U-BOAT; THE OTHER AGAINST AN ENEMY JUST AS BITTER AND UNRELENTING
This and the drawing below, show the recent experiences of a Canadian destroyer of the "Fraser" class in appalling weather brought down in the Arctic current

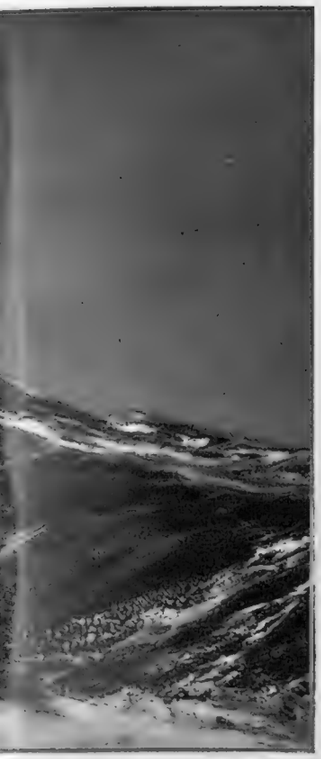
Two wars are being fought off Canada's eastern seaboard: one against the U-boat, the other against an enemy just as bitter and unrelenting—the North Atlantic weather. Men who take the Royal Canadian Navy's ships to sea know that every trip means action—if not with U-boats then with storm, ice and 40-ft. waves. Sometimes they face both enemies at once. "We ran into a gale off Iceland," said one seaman in amplification of a statement that "storms of unusual frequency and severity" have swept the North Atlantic this season. "I went up on deck when there was a gale wind. They said officially it went up to 60 and 70 miles an hour sometimes. We were in the Arctic current that sweeps down from Greenland's ice-cap. Our ships began to ice up. The glass plates on our bridge had a foot of ice on them. That's when you hang on to the life-lines, when the waves toss 40 ft., and you watch for green water spilling over solid. You've no idea of the force of water solid green.

"After 36 hours of icing we were in dangerous shape. The wind was so strong you couldn't breathe. The temperature at sea is always modified by the water, and it was only 16 or 18 degrees below zero. But with the wind and the wet you could work only three or four minutes at a time. It's funny how ice affects ships. Their noses get heavy. A destroyer is narrow, just a few feet wide, but a hundred yards long. A corvette is stubby and wide. So the corvette keeps taking longer rolls and hanging over on her side as if she'd never come back, and she bobs like a cork, without much speed on. The destroyer rides up on the nose of a big one. Another rolls up and her nose keeps going up, up,

"THE DESTROYER RIDES UP ON THE NOSE OF A BIG ONE. ANOTHER ROLLS UP AND HER NOSE KEEPS ON GOING UP, UP, UP. . . . YOU WONDER WHEN SHE'S
you've seen a duck wag its tail to shake the water off? That's what a destroyer does. And, of

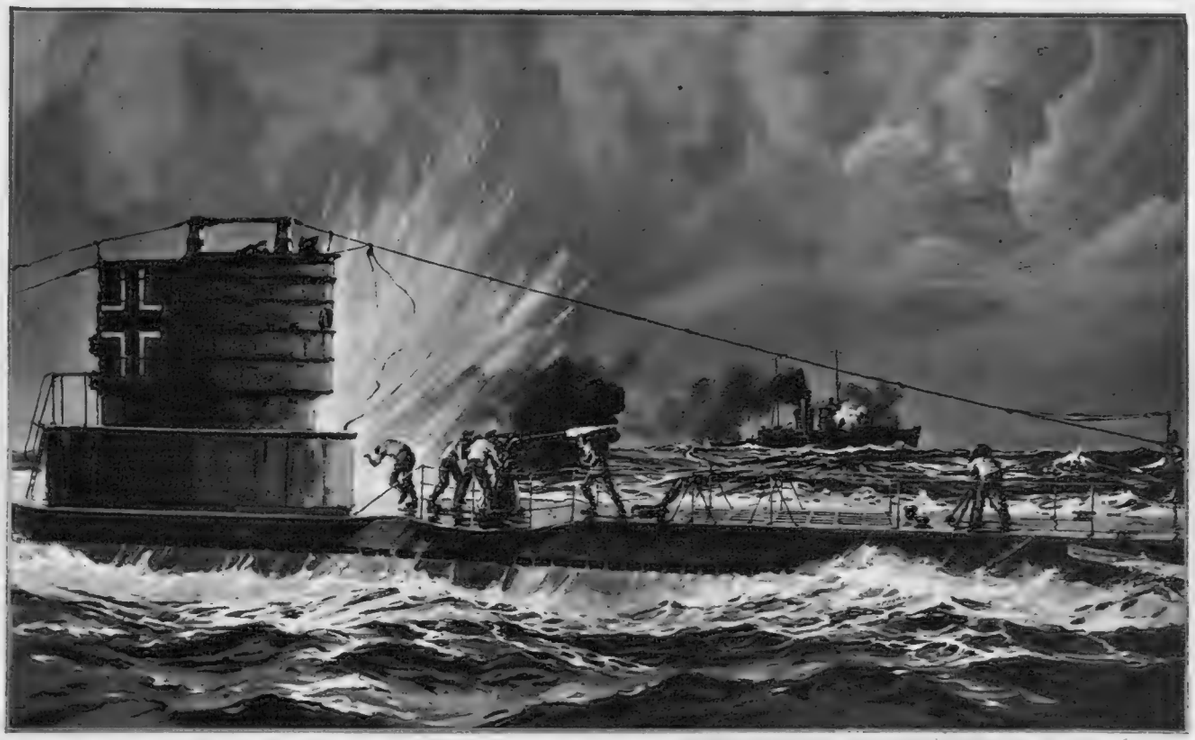
THE ROYAL CANADIAN NAVY in the NORTH ATLANTIC

Destroyers Combating the Ferocious Arctic Weather, and a Corvette In a Successful Attack on a Nazi U-boat—*Special* Sphere *Drawings*



—THE NORTH ATLANTIC WEATHER.
—Drawing by Montague Dawson

up . . . you wonder when she's going to stop and, suddenly, she drops, drops down and down and down until she hits with a crash that makes you think she'll fly to bits. Then she logs down with ice: you think she's never coming back up, either. Her nose gets down in the water, heavy, and the combers come breaking up over the bridge like surf."



A GRIM DUEL IN THE BATTLE OF THE ATLANTIC: How a Nazi submarine met its doom within a few minutes after it had been sighted by a Canadian corvette—*Drawing by Wm. McDowell*

The submarine was on the surface when it was discovered by the warship: after a fierce gun duel between the two vessels, the U-boat made a frantic crash-dive, but it was finally finished off by depth bombs. In the drawing above (reconstructed from a photograph taken from the deck of the corvette), the Canadian vessel has just scored a direct hit on the submarine's conning tower. While the gunners are serving the gun on the U-boat's deck, the range is being given by a man at the range-finder on the forecastle: this is a small type of instrument, with a head-hood to exclude the light and the spray. Note that the U-boat's periscope is down and her hydroplanes are angled ready for the crash-dive that followed

GOING TO STOP and, suddenly, she drops, drops down and down and down until she hits with a crash that makes you think she'll fly to bits. Aft she quivers—course, she's being driven through the water, for she must have speed"—*Drawing by Montague Dawson*

WAR PICTURES from FAR and NEAR

A Y.M.C.A. SING-SONG FOR CANADIAN SOLDIERS : Canteens conducted by the various Services of the Army are "homes from homes" for Canadian lads in uniform. Here they gather to join in song, play games and write their correspondence. This picture comes from famous Camp Borden

ARCHBISHOP SPELLMAN OF NEW YORK IN MALTA : Talking to the children of Senglea. The Archbishop arrived on the Island on April 15 and was received by the Governor, General Lord Gort, V.C. He visited most parts of the George Cross Island before going on to the Holy Land

HALF OF AN ALLIED TANKER, cut in two by a U-boat torpedo, roaming the sea lanes until rounded up by a U.S. coastguard cutter

ITALIAN PRISONERS BEING REPATRIATED IN EXCHANGE FOR BRITISH : Considerable numbers of Italian and British prisoners of war are now being exchanged through a Turkish port. Here Italian officers, going aboard the Hospital Ship "Taires," are being checked in on the quayside : the same vessel will return with British prisoners from Italy

RECONDITIONING CAPTURED ENEMY GUNS FOR SERVICE AGAIN. A general view of a gun park in North Africa where enemy weapons are awaiting attention by the Ordnance Corps

THE END OF THE DERELICT TANKER, blown up to keep the seaways clear. Violently torn asunder by a Nazi torpedo which struck amidships, an unidentified Allied tanker was found by a U.S. coastguard cutter floating in the North Atlantic in two halves. The sections were some miles apart. The stern of the ship is shown here being blown up to keep the shipping lanes clear : the bow section suffered a like fate later

IN THE CENTRAL ARMOURY a 20-mm. Breda gun (in background) is reassembled after repair. On the right, parts of a 12·7-mm. Breda stand in a rack awaiting the repair of remaining parts and subsequent reassembly. A 12·7-mm. Breda, in its tripod mounting, is in the centre : When a communiqué states that "Large quantities of enemy guns and material have been captured" the news is received with satisfaction, but little is known generally of the way these guns are salvaged, reconditioned where possible and eventually used against their former owners. All such guns are evacuated, irrespective of their condition, as soon as possible to the Army Ordnance Depot. Here they are sorted into two main categories : A—small arms, i.e., guns of all calibres, including 40-mm. B—Guns of all calibres greater than 40 mm. All "small arms" are then passed to the doubtful store, where in batches of 200-300 they are taken to the Central Armoury for preliminary examination. They are then classed as available for immediate use, capable of repair, or badly damaged and not worth repairing. Roughly the same procedure is followed with the larger guns which are evacuated from the battlefield to a gun park for inspection. When the repaired guns have been approved after another inspection, they are painted and finally sent to the gun store to await issue

DRIVING THE GERMANS OUT OF THEIR GUN NESTS IN THE CAVES OF TAKROUNA, the most desperate fighting in which the Eighth Army has yet been engaged. The attacking British and Dominion infantry had to capture cave after cave in hand-to-hand fighting before the summit could be reached. Mines and booby-traps (exploded by trip-wires) had been planted everywhere by the Germans

The Eighth Army

MOUNTAIN FIGHTING IN TUNISIA

—The Capture of Takrouna, near Enfidaville

How the Great Rock Mass was Captured in the Face of Cactus Scrub, Cave Guns, Mines and Booby-traps

—Two drawings by E. Byatt

After the British Eighth Army had pushed on to Enfidaville, it was found that the Germans were holding the rocky mass of the Jebel Takrouna in considerable strength. They had made a fortress out of every cave in the hill-side, and these strong-points had to be subdued one by one in fierce hand-to-hand fighting. Men who moved over the base of the "Acropolis" (as our men had dubbed Takrouna) had, first of all, to cross the cactus barriers; fixed fire from machine-guns and mortars covered wide areas; mines and booby-traps were everywhere. The sides of the Jebel rise almost sheer. It was stormed by tommy-gunners, bombing squads and infantrymen, who charged and wiped out one enemy group after another. More than one infantryman, desperately scrambling his way toward a cave strong-point, one hand poised with a prepared grenade, set off mines attached trickily to trip-wires. All day and all through the night the fight went on: by dawn the hill and its village were ours. As an indication of the ferocity of the fighting—the most severe which the Eighth Army had yet experienced—it may be stated that no fewer than three battalion commanders were wounded in the early engagements.

THE FIERCE HAND-TO-HAND STRUGGLE ON TAKROUNA SUMMIT. The men wrestled and struggled on the very brink of precipitous cliffs. Some of the enemy were thrown to the rocks below by British soldiers who had thrown away their rifles and fought with their bare hands

When early morning came, the opposing troops at Takrouna were found to be huddled behind the low walls of the half-fort, half-village which surmounts this sheer-sided rock mass, fighting grenade duels at ranges of from 20 to 30 yards. It was a fight to the death. Impatient British infantrymen, who had already spent two nights and one day in battle and who had suffered heavy losses and whose ammunition was running low, broke from their stone and concrete shelters and grappled with the Germans. There were hand-to-hand encounters and wrestling matches of the most desperate nature. The British troops fought with bayonets, knives and tommy-guns; others, who rejected these weapons, hurled many Germans and Italians over cliffs 1,000 ft. high to their deaths. Much of the fighting was done by the light of a full moon; the casualties on both sides were heavy

The First Army

The CAPTURE of LONGSTOP HILL

The Key Position in the Difficult Mountain Country to the North of Medjez-el-Bab, Stormed by the First Army on April 26

IN THE NEIGHBOURHOOD OF LONGSTOP HILL, the only possible means of transport is by pack-mule. This picture was taken at an infantry position above Kelbine, in the hill country: it shows newly-arrived supplies being unloaded

INFANTRY OF THE FIRST ARMY RESTING AGAINST A CRAGGY WALL after they had captured the height from the Germans. This picture gives some idea of the wild mountain country in which our troops are now fighting

LONGSTOP HILL IN BRITISH

The capture of Longstop Hill was a task which fell to the First Army. It commands the road to Tebourba, and was the hinge on which the whole battle of the previous three weeks in this region had turned. Longstop is 1,000 ft. above the level of the Medjerda River: from its summit the road to Tebourba and on to Tunis can be seen.

The Germans had been in occupation of this commanding spot for four months, and were fully alive to its strategic importance: nevertheless, after our capture, it was discovered that the earthworks on the hill were neither so numerous nor so deep as would have been supposed.

When the assault on the hill was launched, a regiment which had been heavily engaged in the area for some time began working its way round to the south: an hour later, when the enemy's attention was fully engaged with this force, troops of another regiment moved up round to the north and delivered a decisive blow. Each thrust was supported by Churchill tanks. It was

On left—**DURING THE FIGHTING FOR LONGSTOP HILL. A scene during one of the early attacks on the mountain stronghold, showing stretcher-bearers moving up to bring the wounded away. In the background is a Churchill tank, with turret swung round to face the enemy. It was a Churchill which first reached the summit of Longstop after its capture on April 26**

HANDS. THE SCENE ON THE SUMMIT OF THIS STRATEGICALLY-IMPORTANT HILL-CREST, 1,000 ft. high, after its capture by the First Army. The precipitous slopes which dominate the roads to Tebourba and Tunis were only captured after fierce, hand-to-hand fighting—*Drawing by Edward Osmond*

actually a Churchill which first reached the summit. The Germans had fought hard up to this point, but they surrendered readily when parties of our infantry arrived at the top. Soon after Longstop had fallen, Mr. Christopher Buckley paid a visit to our men.

"It did one good to see the men who captured Longstop, and who, unshaven, unwashed and with precious little sleep for the past four days, occupy the trenches, dug-outs and observation posts which had seemed so impregnable," he wrote. "The day being Easter Bank Holiday and many of the men being Londoners, Hampstead Heath formed the dominant motif of their talk. But there were frequent passages of the cheerful grouse which is so essentially of the Cockney.

"The enemy had been shelling the positions held by these troops in the morning, but it was fairly quiet now on the hill, and an occasional shell which burst from time to time near the foot of Longstop seemed a mere impertinent postscript to the battle which had already been fought and won. In a crater a man was playing a mouth-organ. That is the British soldier at war."

On right—**BRITISH TANKS APPROACHING THE EXTREMELY DIFFICULT COUNTRY AROUND LONGSTOP HILL. This region is most difficult for fighting vehicles, but the British tanks showed remarkable aptitude in climbing the steep gradients, some of which were of the "one-in-three" variety**

SPEED IN MODERN AIR COMBAT

Some Examples of Tactics Under the Conditions Existing in the Air To-day

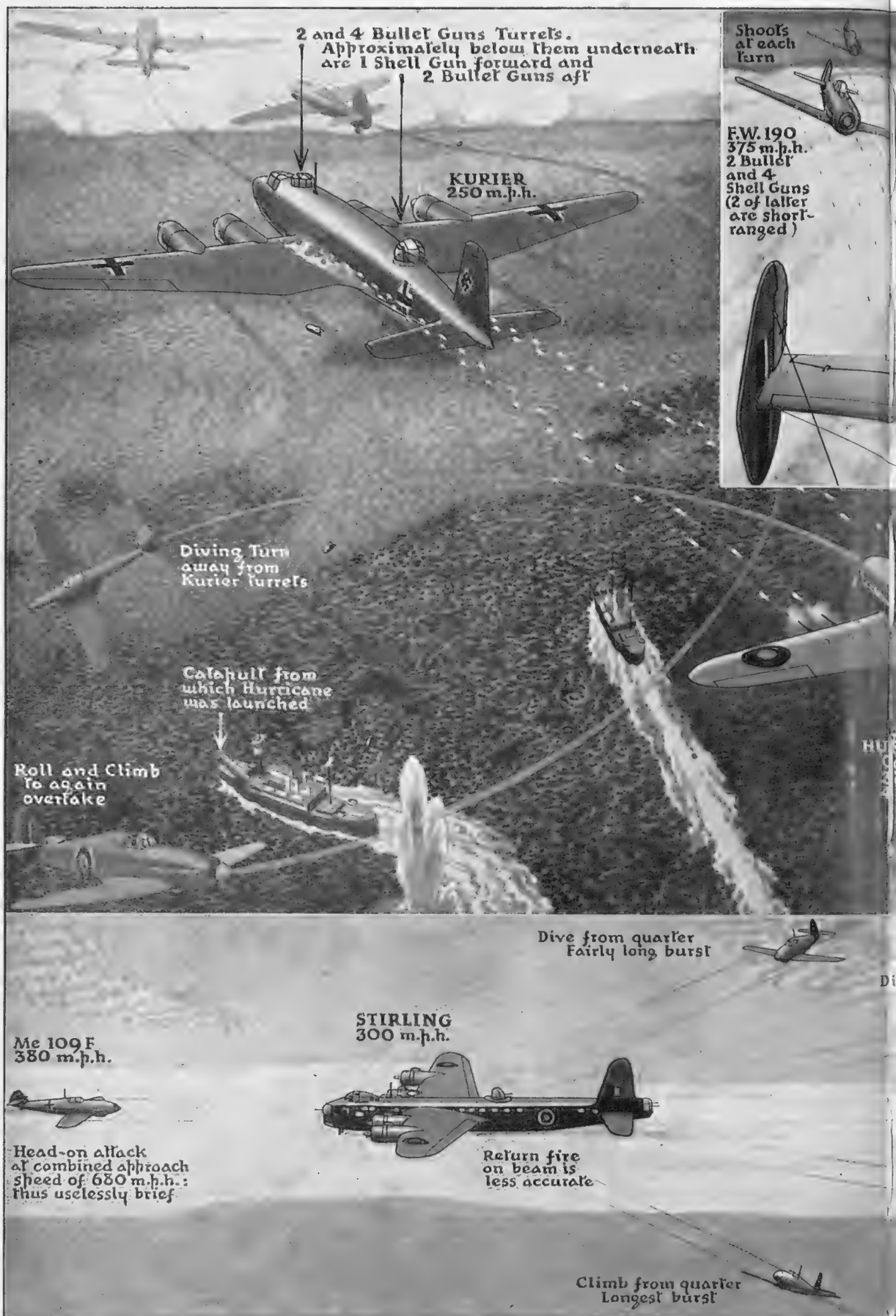
The series of drawings given here show how the greater speeds of to-day have affected the technique of combat in the air; and how battles between differing types of aircraft are affected by the disparity in speed and by different manœuvrability characteristics.

The situation depicted in the top left-hand drawing is that of a typical Catafighter encounter. The Hurricane II has got into a fighting position after having been catapulted from the deck of the ship seen below: in front of him is the huge four-engined German Kurier, which is intent on attacking the convoy. The Hurricane gets in a burst, and the Kurier would possibly be destroyed in the first contact; he is certainly doomed to be shot down sooner or later, unless he can hide in cloud; where, incidentally, he may still be in greater danger than he imagines! The Hurricane is shown doing a diving turn after the first burst of fire: a roll and climb will then bring him back into position for a second attack. (The fighter is repeated, in simplified fashion, in various attitudes to indicate its position at successive stages during the fight.)

The top-centre drawing shows fast fighter *versus* slower bomber in a typical German manœuvre. It will be seen that the Halifax (only the rear portion of which is shown), is in an unhappy position, for the F.W.190 can stay outside the bomber's effective range and still attack. The German swings from side to side, in order to avoid trouble as he gets near the tail of the Halifax; but this manœuvre slows up his pursuit speed and limits his own bursts of fire to a few seconds at the turns. The Halifax would probably seek cloud cover at once. Bombers usually fly in company during the day, but formation-flying at night is largely impracticable. The real answer would seem to be to put shell guns into the turrets of big bombers; but this is not easy of achievement. These remarks also apply to the Stirling mentioned below.

The large drawing on the right is a case of Fast *versus* Very Fast. A Spitfire, with a speed of 400 m.p.h., has met one of the new German Me.210s, with a speed of 365 m.p.h. What can happen, or what is likely to happen, in such circumstances? In this case the Spitfire is presumed to have caught the Me. (at a grave disadvantage to the latter) over a cloud-edging. Had the Me. seen the Spitfire in time he would probably have swung towards him and shot it out, when the German's heavier armour might well have turned the scale in his favour. These suicidal split-second contests are avoided where possible, however; the Spitfire, if wise, would turn aside and again manœuvre into position by looping and rolling upwards, as shown here. The Me. has meanwhile dived, and the Spitfire dashes after him. Subsequently, it will be found that the German cannot extricate himself normally from marked disadvantage. Incidentally, the Me.210's barbette is a useful new idea, and, fitted with shell guns, would make the machine much more formidable. As it is, it requires skilful and protracted fighting; amongst numerous small clouds there is little opportunity for this. As in every new machine the Germans have produced, they have consistently under-estimated requirements.

The diagram in the lower left shows the various angles from which a fast Me.109 fighter might attack a slower Stirling bomber, and their effect upon the speed of approach and consequent firing interval. One other point may be



MODERN AIR BATTLE TACTICS: A SERIES OF DRAWINGS SHOWING HOW THE INCREASE IN THE SPEED OF MODERN FIGHTERS Hurricane II and Spitfire V and the German Me.109F, FW.190 and Me.210: the bombers are the British Halifax and Stirlin

Special Sphere drawing

AND BOMBERS HAS BROUGHT ABOUT A CHANGE IN THE TACTICS OF ATTACK AND DEFENCE IN THE AIR. The attacking aircraft in these drawings are the British and the German long-range Kurier. Not only the speed of fighter aircraft comes into the question, but also their manœuvrability and general handling characteristics

by S. W. Clatworthy (Artist's Copyright in the U.S.A. and Canada)

noted in relation to defensive firing on the beam. Head-on fire of equal weight and range is integrally superior to beam fire: a projectile fired on the beam has an oblique "drift," imparted by the forward motion of the plane; interaction between this and the spin due to the rifling, causes it to swerve aside somewhat, so that the tracer path has to be watched carefully in place of the gunsight.

Throughout these diagrams the terms "shell gun" and "bullet gun" have been used as being more explicit and illuminating than the usual "cannon gun" and "machine-gun." Cannon is a meaningless, rather misleading, term; it is, in any case, just as much a machine-gun as is the acknowledged M.G. The real difference is that one fires shells, the other bullets. The shells have a bigger, though less rapid, punch; and they have a longer range, varying from one and a half to twice that of a machine-gun.

Top left—Hurricane IIc (or "Catafighter") in action against a German long-range Kurier at sea. The former has a speed of 380 m.p.h. against the German's 250 m.p.h.: it is launched by catapult from the deck of a special merchantman Carrier.

Top Centre—Halifax II *versus* German FW.190 fighter. The bomber has a flat-out speed of 300 m.p.h. against the German fighter's 375 m.p.h. The Halifax is, however, equipped with a good rear turret, and has often emerged victorious against enemy night-fighters.

Bottom left—British Stirling under attack by German Me.109F. Speed—300 m.p.h. against 380 m.p.h. Various methods of attack by the German fighter are depicted here, showing the advantages of the different angles and methods of approach.

On right—Fast fighter *versus* faster fighter. The German Me.210 has a speed of 365 m.p.h. against the Spitfire V.'s 400 m.p.h. In an encounter of the type analysed in this drawing, the advantage would lie with the British machine

THE EIGHTH ARMY EXPERIENCES SOME TOUGH FIGHTING NORTH OF ENFIDAVILLE AND TAKROUNA. The heights held by the enemy commanded the main coastal road : these are known as the Hallouf Heights. Behind them rises the mass of the Jebel Zaghouan, with a semicircle of foothills at its base—*Drawing by Percy Home*

The Eighth Army

THE NEW GERMAN HILL LINE

The Hallouf Defences taken up by the Enemy after the Fall of Enfidaville and Takrouna

—Special Drawings and Diagram

Whilst General Montgomery was in Cairo for his Easter visit, the Eighth Army in Tunisia were steadily preparing for the attack on the new positions taken up by the Afrika Korps after the fall of the Takrouna rock mass (see also p. 205 of this issue). The new line is shown in the above drawing.

Roughly, it runs along the sharp ridges of a line of hills which lie some five or six miles beyond Takrouna. "The new line—part and parcel of the general defence in depth on this side of Bou Ficha—will probably be known as the Ain Hallouf defences," wrote Mr. Douglas Brass from Tunisia. "It dominates the undulating country in front even more unpleasantly than the hills which are now in the hands of the Eighth Army. It backs on to steeper and higher mountains to the north, which may in their turn temporarily hold up the most successful of assaults."

The line links up with anti-tank ditches astride the main coastal road and in Hallouf itself, where the coastal salt marshes constitute a natural barrier. Before this Hallouf range there are many enemy infantry and anti-tank gun posts which form a strong protective screen in front of the main positions on the slopes and peaks of the mountains.

Many of these forward posts are manned by only two men during the day and reinforced at night by at least a full company. These tactics are in curious contrast to those followed on the Ruweisat Ridge at Alamein, where positions which were taken at night were frequently manned during the day.

One interpretation of this is that the enemy have had enough of Montgomery's night attacks to make them unusually nervous during darkness. This nervousness is clearly shown by their tendency to open up with scores of machine-guns at the slightest sign of movement, patrol or otherwise, on the part of the Eighth Army's forward units.

Their immense strength in machine-guns and the toughness of their well-defended hill positions of the Bou Ficha coastal plain are revealed incidentally by the amount of material captured around Takrouna.

SAPPERS KEEP THE TUNISIAN RAILROADS RUNNING FOR FRONT-LINE SUPPLIES : Many units of the R.E. Railway Construction and Railway Operating Companies are working on the Algerian and Tunisian Railway Systems in co-operation with French railwaymen. All the drivers, guards, shunters and Track Repairing Squads are peacetime railway workers : their jobs, although new to them, are amongst the most important in the field

SIX GERMAN HELMETS hanging on bayonets beside an enemy vehicle wrecked as the result of an R.A.F. road-strafing attack between the towns of Kairouan and Enfidaville

TWO MULES TAKING A LOAD OF WATER TO THE FORWARD TROOPS : The water containers are "Jerricans," a new type of petrol can now being used in Tunisia

THE APPROACH TO THE JEBEL GARCI, TO THE WEST OF ENFIDAVILLE, BY THE EIGHTH ARMY: The 1,200-ft. hill which General Montgomery's infantry attacked with knives, to hack a way through the dense scrub and to assault the Germans holding positions in the foothills—*Drawing by W. G. Whitaker*

The British infantry soldier—unlike Commando and Parachute troops, who carry a two-edged knife 9 in. long—does not, as a rule, carry a knife as a weapon of offence. He relies in close fighting on the new and short bayonet of cruciform pattern. A sheath-knife with a 6-in. blade is, however, included in his personal equipment. But at the capture of the Jebel Garci our troops were armed (in addition to tommy-guns and grenades) with special fighting knives for hand-to-hand combat as they clambered up the rocky, shrub-covered slopes. As the troops reached the mountains, thick fog swept inland from the coast a few miles to the east. But it soon rolled away and the battlefield was then lit up by the brilliant full moon. Every few minutes, as the men hacked their way with knives through the high pear hedges bordering the fields, lights guided the gunners, who maintained a creeping curtain of bursting shells only a few hundred yards in front of the infantry. By this means several thousand infantry advanced through thick cactus and olive groves in the No-Man's-Land at the foot of the mountains. The fall of the Jebel Garci followed a little later, and the command of a large area of the German defence line was thus secured

THE PACK-MULE COMES INTO ITS OWN AGAIN IN THE MOUNTAIN FIGHTING IN SOUTHERN TUNISIA. Gunners of the Eighth Army dragging their 25-pounders into position up the hill-slopes, supported by anti-tank guns carried on the backs of pack-mules—*Drawing by W. G. Whitaker*

When the Eighth Army reached the rock country around Takrouna (*see also* p. 205 of this issue) they came up against seemingly impossible obstacles closely resembling the walled mountains of Eritrea. To the left and right of the table-topped Takrouna, the Germans were occasionally counter-attacking with infantry supported by tanks: but in the process they were shot up by our advanced 25-pounder guns. These guns, whose barrage in the first onslaught pinned down strong-point after strong-point in great gunnery displays, did magnificent work. They were dragged up to positions from which they were able to pour down shattering fire upon concentrating enemy formations. In addition, anti-tank weapons were transported by mules to almost inaccessible positions commanding the enemy's lines; the mules had been collected by the Eighth Army during the last stages of their advance through Tunisia. Thus the war of sand expanses and spectacular wheeling movement had degenerated for the Eighth Army into medieval battles upon hilltops, with short infantry assaults of the Flanders type, and transport in places by pack-mule!

THE CAPITAL CITY OF TUNIS SEEN FROM ACROSS THE INLAND LAKE: The Old Town, with its walls and strongly-built houses, might have provided the setting for a strong defence by the Germans, if they had decided to make the city another Stalingrad (see notes below)—*Drawing by E. G. Lambert*

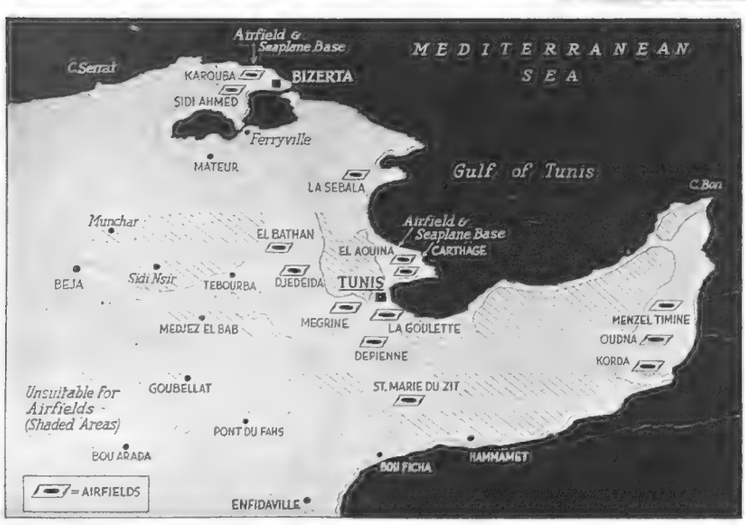
The CAPTURE of the CITY of TUNIS

Which Fell to the Allied Forces on Friday, May 7

THE Tunisian capital, which so very nearly fell to the Allies in November last, when our advanced forces almost reached its gates, is separated from its hill rampart to the west and south by a wide, undulating plain; on its immediate western front it is guarded by a broad, marshy sheet of water. The ancient and modern cities lie on the neck of land between this Inner Lake and the outer, or Harbour, Lake.

The question has arisen as to whether the city could have been defended in any desperate manner by the Axis forces. It is, in fact, better adapted for this kind of street defence than Bizerta, which, although heavily gunned, is open to modern forms of attack. The Old Town of Tunis on the other hand, would have lent itself strongly to defence, for much of its old walls remain and the houses are heavily built and the streets tortuous.

AN AERIAL VIEW OF THE CITY OF TUNIS, with the Harbour in the background. The city is of considerable size and contains many buildings in the modern style: its main streets are wide and elegant, and its harbour facilities considerable



AXIS AIRFIELDS WITHIN THE GERMAN DEFENCE AREA. The white areas show the districts which can accommodate aerodromes. The darker areas indicate the more hilly country, where airfields are impracticable

Vice-Admiral Muselier, formerly Commander of the Bizerta naval base, in an interview, said recently: "Last November I said that the Germans would last in Tunisia until Easter. Now it looks as though they will keep going another month or six weeks. The Germans have enough men to offer desperate resistance, if they have the will to fight to the last, and if they have the material.

"An imponderable factor is to what extent the French defences were put out of action under the Armistice terms. We have every reason to hope the destruction was thorough; otherwise the heavy French batteries may prove awkward for the Allies. The native quarter of Tunis, with its solidly-built houses, offers the possibility of desperate defence on Stalingrad lines. In Bizerta, which is a purely naval base, there is no chance for a Stalingrad defence. I believe it possible to bottle up the harbours of Bizerta and Tunis so as to make the escape of larger vessels practically impossible."

The great mosque, which dates from the thirteenth century, possesses a fine minaret tower. The building stands in the midst of the Souks, the most characteristic and attractive of any city in Africa, and makes a convenient landmark for those who wish to identify them. The Kasbah in Tunis formerly contained the Palace of the Beys, barracks for troops, and the bagnios, or prisons, for Christian slaves. All these buildings have disappeared; the enclosure is now a Fortress, and was formerly a caserne for the French garrison. Of the ancient Kasbah only the exterior wall remains. It was here that 10,000 Christian slaves, confined by Kheir-ed-Din, escaped from their prison and opened the gates of Tunis to Charles V in 1535.

AIRCRAFT PRODUCTION ACROSS THE ATLANTIC OCEAN

CANADA CONTINUES TO FORGE WEAPONS FOR THE UNITED NATIONS. The armed forces on every battlefront are being supplied with weapons of war forged by Canada's great industrial machine. Planes, tanks, guns, uniforms—all types of fighting equipment are taking shape in ever-increasing volume under the skilled hands of Canadian men and women war-workers. Many types of Service aircraft are being constructed in their entirety in Canada in factories which were non-existent a few years ago: the picture above shows the all-wooden wings of the Anson nearing the end of the production line

HAULING "BLOCK-BUSTERS" BY MECHANICAL LIFT: This 2,000-pounder is lifted by a 120-lb. woman at an Army Ordnance depot in the Eastern U.S.

TEMPORARY HOMES FOR U.S. WAR-WORKERS. Trailers fill this site in one of the world's largest camps near Portsmouth, in Virginia. It covers an area of 290 acres and contains no fewer than 2,300 caravans, the occupants of which are all engaged on war work

THE WORLD'S MIGHTIEST CARGO PLANE: An unloading crew removes a cargo of freight from a giant Douglas C.54 (known as the "Skymaster" in the U.S.) which has just landed at an American West Coast airport

This aeroplane is claimed to be the largest of its kind in the world: it is somewhat similar to, but larger than, the Douglas C.47, which has already proved itself as a freight- and troop-carrier in the South-West Pacific. The C.54 can carry fifty fully-equipped troops or, alternatively, loads of ammunition, jeeps and small cannon. The main cabin is provided with a large loading door and a floor reinforced to carry heavy loads. An ingenious derrick has been devised to haul heavy items of cargo aboard. The "Skymaster," as it is known in the States, is now in full production for the U.S. Army. A sister aircraft to the one shown above carried President Roosevelt to Casablanca

HIGH SPEED IN THE AIR

And the Phenomenon Known as "Black-Out" which Accompanies It During Aerial Manœuvres

—New Pictures of the World's Fastest and Most Versatile Aircraft, the Mosquito, in Production

THE increased speeds at which modern planes fly has brought many new problems to both designers and flyers. One of the most difficult to solve, because it affects the pilot, is liability to "black-out." This is the name given to the condition experienced by the pilot when his plane, travelling at high speed, suddenly makes a sharp turn or pulls out of a dive.

Fighter pilots in the last war were not affected by this painful condition. Those early warplanes rarely got beyond a speed of 120 miles an hour, and the black-out problem arises from the effects of super-acceleration on the human body. Simply stated, acceleration is the rate at which a body increases its rate of travel through space, and it is through this change that centrifugal force is set up and the blood-pumping system of the body upset.

In the case of simple black-out, the pilot will only lose vision, temporarily, but if exposure to acceleration continues he will soon lose consciousness. When the plane goes into a sharp turn it, in effect, stops, and then reverses its direction of travel. The heart, which pumps the blood all over the body, finds difficulty in raising the blood to the head; centrifugal action is too much for it. With the blood trying to travel outwards in the direction in which the plane was originally flying, vision gets dimmer, and black-out, followed by unconsciousness, results if the turn is prolonged. The pumping-station of the body is not the only part affected by this sudden change in direction of travel, however. Blood-vessels and arteries object to such violent treatment, and Nature provides a very speedy answer to man's desire for rushing through space. The material from which blood-vessels are made is very elastic. When sudden acceleration causes pressure on them to alter, blood pushes against the walls, and these distend, holding the blood in pockets. In this way, circulation is temporarily held up, resulting in lack of oxygen reaching the brain.

THE ATTITUDE OF A FIGHTER PILOT DURING A STEEP TURN which is nearly approaching the vertical. He is pressed down in his seat by centrifugal force, and the draining away of blood from his head may produce a black-out at the critical moment

—Drawing by Roland Davies (See accompanying notes)

A STRIKING PICTURE OF A WHIRLWIND DOING A STEEP TURN OF SOME 80 DEG., during an aerobatic exhibition. As the modern fighter goes into a sharp turn, his plane banks over at an acute angle. The sudden change of direction forces the pilot down into his seat, and the blood in his head, trying to push on in the direction in which the plane was originally travelling, is forced down towards his feet. This is the danger moment. The sight is temporarily affected, and the whole of his faculties are, for the moment at least, useless. Individual airmen are subject to black-out in greater or lesser degree. Youth has a better chance than more elderly pilots, and for this reason air crew are rarely accepted in the R.A.F. above a certain age. When making a steep turn, the ordinary man can stand up to a limit which makes his turn six times that of the equivalent of gravity. Above that, without special precautions, comes black-out

The pumping-station of the body is not the only part affected by this sudden change in direction of travel, however. Blood-vessels and arteries object to such violent treatment, and Nature provides a very speedy answer to man's desire for rushing through space. The material from which blood-vessels are made is very elastic. When sudden acceleration causes pressure on them to alter, blood pushes against the walls, and these distend, holding the blood in pockets. In this way, circulation is temporarily held up, resulting in lack of oxygen reaching the brain.

The effect of sharp turns on the heart is that it may be called upon to do seven or eight times the amount of work it usually does, and this without any warning or chance to adjust itself to changed conditions. It has been suggested that it would be possible to increase the speed at which human beings can travel by at least twice the present maximum if acceleration were gradual, instead of sudden.

To overcome the problem of black-out in the air, it has been found necessary to tackle it from two sides. Aircraft design may solve some of the difficulty, but part must result for its cure in the work of the flying doctors.

Several mechanical experiments have been tried and some give partially successful results. American researchers have developed a special flying suit. This has between its layers of material a space which is filled either with air or a liquid which is under pressure. Fully encasing the pilot's body, this gives him even support, which tends to rectify the centrifugal force. This suit is a variation of the method of tightly binding the body practised by many test pilots. Blood-vessels do not distend to such a degree and the blood is better able to circulate normally.

German inventors have tried to design planes that would better allow their crews to overcome black-out. It has been found that pilots can best withstand the sudden strain if they are either in a crouching position or when lying flat. In these positions the heart does not have to pump blood up to the head, and less is felt as a plane suddenly changes its direction of flight. So *Luftwaffe* designers have built a plane which provides for a crew of two, who lie on their faces in a prone position in the wings.

One way of overcoming the difficulty easily is provision of an adjustable seat, which tilts the pilot into a lying position when his plane makes a sharp turn. This compensates for the extra work the heart is called upon to do, although with head and feet on the same level the airman is not in the best position for controlling his plane.

Medical research in recent years has devised special courses of physical training to prepare airmen for variations in acceleration. By simulating conditions as they are met in the air, and gradually increasing the speed at which the direction of travel is changed, doctors are able to train pilots so that they are not so easily affected in the air.

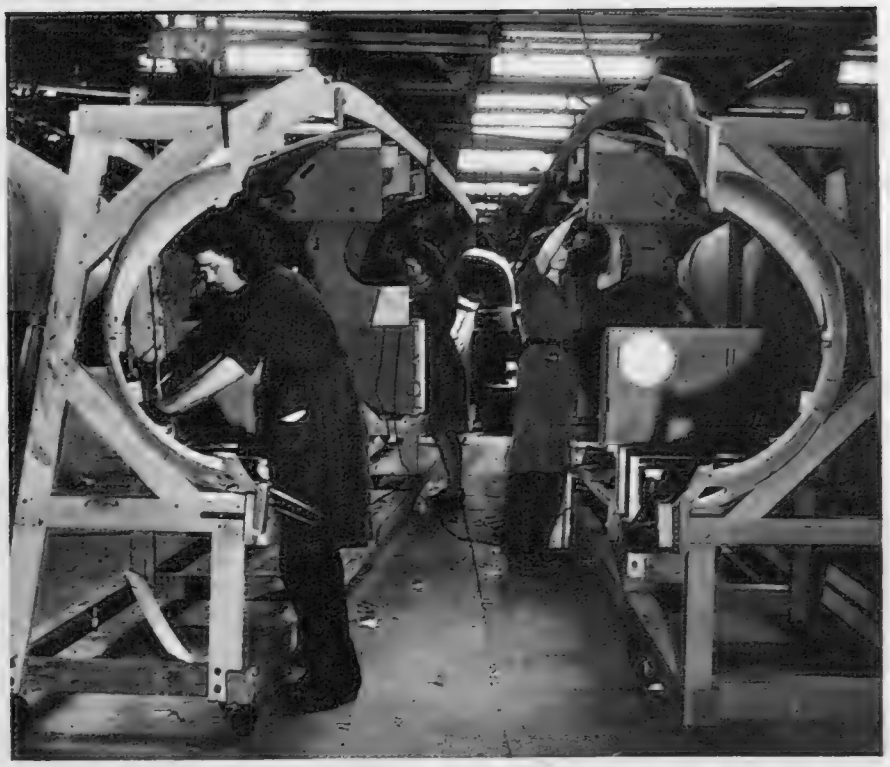
Fortunately, acceleration is usually of short duration in air combat. The strain to the human frame is governed by the period over which acceleration extends, and if the time taken in making a turn is sufficiently short, the airman will experience little more than a short spasm of partial blindness.

As modern warplanes get faster and faster, scientific research is being called upon to solve even bigger problems. Probably, the doctors and designers will, together, be able to find a complete cure for the pilot's nightmare of high-speed black-out.

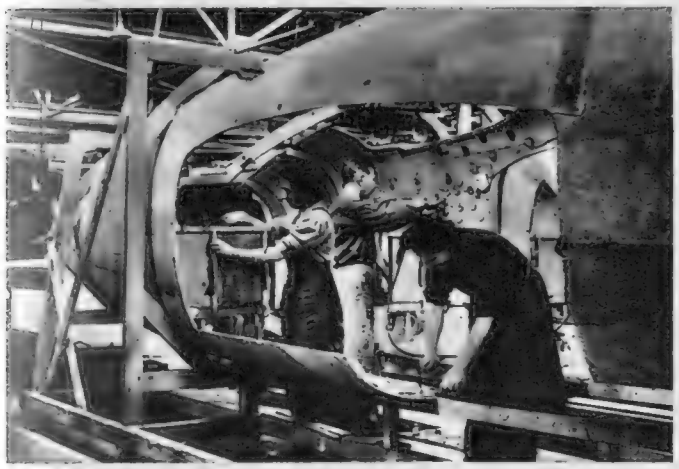
THE TWIN-ENGINED MOSQUITO IN FLIGHT: the aircraft which has been bombing Germany and Occupied France in daylight raids

The Mosquito, or D.H. 98, is the fastest aircraft in operation in the world to-day: it has also the most widely dispersed production. It is now generally known that the Mosquito is in service in several different versions; it can figure as a day or night bomber, a long-range day or night fighter, intruder, etc. The basic fighter has four 20-mm. cannon and four ·303 machine-guns, all mounted in the fuselage nose, and thus giving a highly concentrated fire. The basic bomber can carry 2,000 lb. of bombs, with a fuel range which brings practically the whole of Germany within its reach. Not only is the Mosquito the fastest aircraft in the world to-day; it is also the most versatile. It is extremely manœuvrable and has exceptional flying characteristics. The chief feature of its construction is the fact that it is built of wood (hence its widely dispersed production); and the hull is designed in two separate halves, which facilitates the assembly. It is the only entirely new operational aircraft to have been designed since the war began

A GENERAL VIEW OF THE MOSQUITO UNDER CONSTRUCTION in a British aircraft factory. The two sections of the hull have been joined up, and the wings are being attached to the fuselage

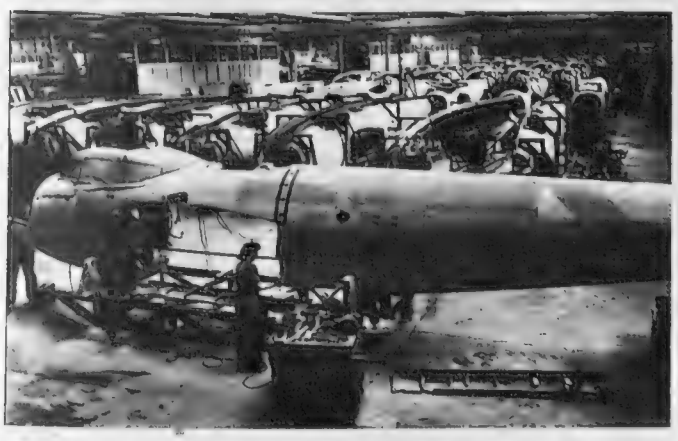


GIRL OPERATORS AT WORK INSIDE THE SHELL OF A MOSQUITO. Later, these two halves will be joined together and the fuselage thus completed. Women are figuring largely in the production of this aircraft



The wood material out of which the aircraft is largely built is here quite apparent. This picture shows the Mosquito's nose

With the two halves coupled up. In front is the tray in which the aircraft's armament will later be installed



A scene in the main assembly shop, in which the two completed hull sections are joined together. The grain of the wooden hulls can clearly be seen in this picture

A NEW FIGHTER TYPE WHICH IS PROVING PARTICULARLY USEFUL IN TUNISIA. The Lockheed Lightning twin-engined, single-seat interceptor, destroying a Junkers 52 transport—*Drawing by Roland Davies*

In pursuit of the big transport aircraft which the Germans used in North Africa for reinforcements and supply across the Sicilian Narrows, the U.S.-built Lightnings proved exceptionally dangerous as destroyers of the lumbering enemy troop-carriers. The Lightning is built by the Lockheed Company: it has two engines, and it is unique among standard fighters in that its tail is mounted on twin booms behind. The pilot sits in a central cabin between the two engines, with his guns set in the cabin's nose. The armament is not definitely stated, but it is known that earlier aircraft of this type carried either four 0·5-in. machine-guns and one cannon gun, or two 0·5-in. machine-guns, two 0·3-in. machine-guns and one cannon. The maximum speed with which the Lightning has been credited is 400 m.p.h., but, equipped for operational work, it is probably less than this somewhat optimistic figure. The aircraft was designed in California in 1936-37, and was first test-flown in February 1939. Numbers of Lightnings have been reported as having taken part in the air fighting over Tunisia recently

PAVING THE WAY FOR THE CAPTURE OF MATEUR : American repair crews are here seen filling in holes in the road to accommodate the heavy truck and tank traffic during the approach of American armoured forces towards the great German stronghold of Mateur, within the Bizerta-Tunis defence perimeter. This picture gives a good idea of the manner in which the rains can play havoc with the lesser roads in North Africa, and the amount of labour necessary to repair the ravages of neglect and Nature !

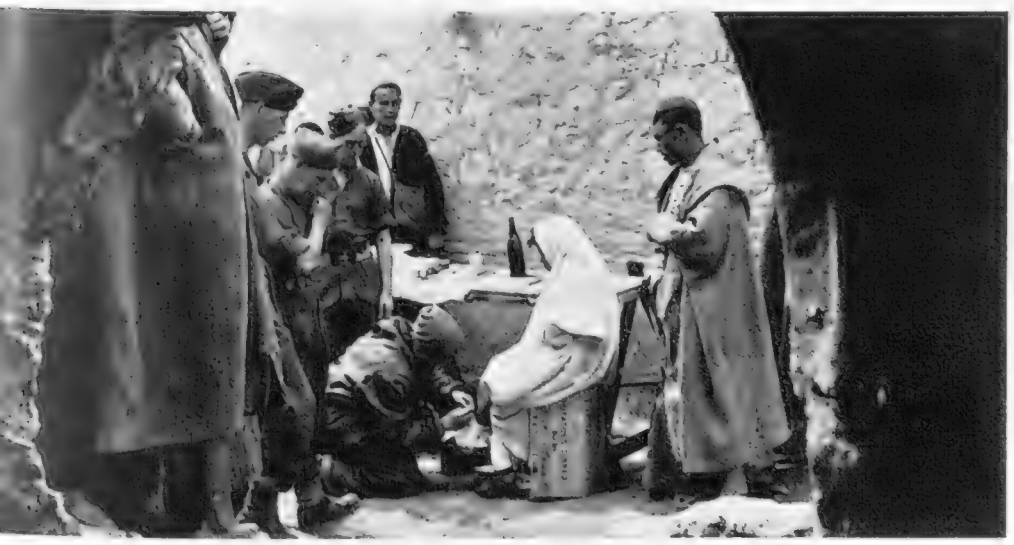
SCENES BEHIND the FIGHTING AREAS in NORTH AFRICA

AN R.A.F. ARMOURER UNPACKS A LOAD OF TROUBLE FOR THE AXIS ON A FORWARD AIRFIELD : These men have a busy time behind the lines as each new wave of bombers goes over to attack the enemy positions. They have to prepare and fuse the bombs, have fresh supplies of ammunition ready to take aboard, and generally provide the fire-power for our aircraft. This armourer's squadron had just moved to a new airfield and preparations were being made at once for attacks against the enemy

A U.S. NURSE BEHIND THE FIRING LINE : Hanging out washing she has done for one of the boys returned to the front after resting with minor wounds. She is one of a group of plucky girls living under canvas and roughing it along with the men, miles away from any sign of civilisation. But the nurses in Tunisia are too busy tending their sick to notice the dreariness of their surroundings : the calmness and fortitude with which they have gone through their first baptism of fire have earned for them the admiration of American fighting men

THE NORTH TUNISIAN ARABS WELCOME THE ADVANCING FIRST ARMY : A sergeant of the Field Security Police is here explaining to some of the Arabs near Medjez-el-Bab the meaning of recent Allied victories. Amongst his audience of villagers was the local Sheikh. This sergeant speaks fluent Arabic : he escaped from the Germans in Tunis and joined the British forces

THE JEWS OF KAIROUAN TEAR OFF THEIR FORCED LABOUR BADGES AS THE BRITISH ENTER : When British troops entered Kairouan they were given a tremendous reception by the grateful people of the town. Members of the Jewish population—who had been subjected to harsh anti-Semitic measures by the Germans and compelled to do forced labour without payment—tore off the Star of David, which they had been forced to wear, as the British troops rode in. With some of these young men in the above picture are the first two British officers to enter the town



FREE BRITISH MEDICAL TREATMENT FOR THE ARABS : The British Army gives this treatment by means of Field Ambulance Sections, which now travel from village to village tending the local populace. Medical orderlies arrange sick parades each morning and themselves wear special clothing to protect them from infection. In this picture, in one of the mobile Dressing Stations, a native Arab girl is undergoing treatment

THE GERMAN DOMINATION OF FRENCH CIVILIANS IN NORTH AFRICA : Ejected from their home in Sfax and forced to live in a garden shed next door : Mmes. Marcelle and Nicole Loiseaux, Jean Claude and Michel

THE LOISEAUX FAMILY OUTSIDE THE SHED WHICH THEY WERE FORCED TO OCCUPY : When the Germans occupied the town of Sfax they commandeered the home of Mme. Marcelle Loiseaux and forced her to live in a shed in the garden of the house next door. With her went her two children, Jean Claude (aged nine) and Michel (aged seven). Her sister-in-law, Mme. Nicole Loiseaux, also had to leave the house

THE ALLIES GIVE FREE MILK TO NORTH AFRICAN CHILDREN : Two Arab girls are pictured here with their daily ration of milk at a Moslem school in Algiers. Above them is a poster which is now to be found in many schools in North Africa

The FIERCEST FIGHTERS in the WORLD

The Native Goums who are Fighting with the French Forces in the Hills of Tunisia—Who They Are and What They Are

Described by CHARLES GRAVES

FREQUENTLY in the past few weeks references have appeared to the Goums fighting in the Corps Franc of North Africa. Sometimes they are qualified by the adjective "terrible"; sometimes they are described as "Native Levies" or "Colonial Troops." To be exact, they are auxiliary cavalry drawn from the Chleuh Clans of the Berber race. At that, they should not be described as Goums unless one is referring to them as collective forces of 2,000 men apiece. Individually, they are Goumiers, and can no more be described as a Goum than a man in the Commandos can be described as a Commando (or a platoon).

Anyone who has had the good fortune of seeing the Fête des Moutons, or the Last Day of Ramadan at Marrakech (as I have done), will have seen the Goumiers at close quarters and will have realised what formidable fighters they inevitably must be. At the Fête des Moutons it is a tradition that a lamb must have its throat cut about two miles from one of the palaces of El Glaoui, paramount Pasha of Marrakech and the Atlas Mountains. This lamb must be taken on the saddle of a Goumier to the palace before it is dead. This involves a terrific gallop through narrow alley-ways, bazaars, and all the other obstacles of a large native city. If the lamb is dead on arrival, it means that the whole country-side will suffer from some disaster during the year. Nearly always the lamb is still alive. That may be a mere matter of speedy horsemanship, but the Goumiers' favourite sport of hunting hares on horseback and killing them with a stick (without dismounting, of course) shows that they have a good "eye."

These Goumiers, who are now harassing the Germans and Italians in Tunisia, are among the fiercest fighters in the world. What is more, the past three or four months have shown that they have an innate gift for mechanics. For they are now armed, in addition to their rifle and one mitrailleuse per platoon, with grenades, Stens, more mitrailleuses, and even 29-mm. mortars (as the sketch below shows).

In the field they wear long, loose woollen khaki cloaks, known as jellabas or gandouras, with turbans, tall boots and gaiters or camel-skin sandals. Their trousers are of the plus-four variety. They carry bandoliers and ammunition pouches, like Mexicans, but always arrange them so that they never cross. To them a cross is the sign of death, and, being superstitious, they do not like to wear it. (You have never seen an upright cross even in the most intricate weaving of a Moorish carpet.) This gives a further reason for their dislike of the Nazis and the Nazi cross. Their original hatred for the Germans is due to their realisation that the Herrenvolk theory would make them slaves. As for the Italians, they loathe and despise them.

Primarily, the Goumiers are mountainy men, with such a passion for their horses that when, just before the final collapse of France—when the Italians had declared war—a number of them were being transported 4,000 kilometres to the border, they travelled with their animals in the same open lorries. On this occasion they slaughtered a number of Italian outposts, and could not understand why France gave up the war while they still had men to fight. In fact, when they were transported back to the south, once again travelling with their horses in open trucks, they came to the conclusion that the French were merely having an armistice, in order to gain time and secure themselves more weapons before renewing the war. It did not, therefore, come with any surprise to them when the North African campaign was opened, and they have returned joyfully to the battle.

General Nogues announced in Tunisia the other day that he has 30,000 Goumiers fighting for France. This seems rather a high figure, but still. . . . There are always 10,000 Goumiers under arms in peacetime, and their numbers rapidly increase when there is a call to arms.

In peacetime they are issued by the French Government with rifles, cartridges and Service dress. They provide their own horses and saddles. Their affection for their animals—Arabs, of course—is remarkable. They are quite inseparable, unless there is mountain fighting of the type now taking place in Tunisia. They never allow their horses to walk if there is any other form of transport. And if there is any question of shortage of food, they share what they have unequivocally with their animal. This is naturally welcome to the latter, because, when on active service, the Goumiers always carry barley cakes and hard tack, eating dates and vegetables only, when they can secure them, *en route*. Their favourite drink is sugared mint tea, but from the point of view of survival in desert country, they are like camels—as far as water is concerned. As for eating, they will eat ten times as much as a European at one meal, and will then be able to go without food for ten times longer.

Their military unit is a platoon, officially of forty men, with one European N.C.O. and one native N.C.O. Sometimes the French authorities mix eight or nine Frenchmen with one of these platoons. Three or four platoons form a company. Then comes the Goum itself, amounting to 2,000 men, commanded by a French captain. Usually the native N.C.O. is the local clan or sept leader, and his pay is in the neighbourhood of 3,000 francs a month. War correspondents in Tunisia have described them as wearing steel helmets and rope-soled shoes. But if one goes by Fighting French officers who have commanded them in the field, this is incorrect. No Goumier, I am assured, would ever remove his turban in favour of a steel helmet. Under their turbans their heads are shaved to the skull, except for the Tuft of Allah (by which they will be drawn to heaven). To make up for this, the vast majority wear small beards.

It was Marshal Lyautey—in my opinion, easily the greatest Frenchman since Napoleon—who introduced the Goum system into Morocco in 1927. In other words, he made irregular yeomanry out of the tribesmen of the Shawia, the Gharb, and the neighbourhood of Marrakech. Since 1940 the Goums have been strengthened by Goumiers from Spanish Morocco. It has been stated that in areas where the Italians are holding the line enemy morale has dropped 100 per cent. when they have discovered that the Goumiers were facing them. Indeed, on one occasion leaflets were dropped over Italian lines warning them of their opponents, and advising them to remove their boots before surrendering, which they promptly did. It seems that the Terrible Goumiers have a terrible penchant for the beautiful soft leather Italian boots. In addition to their rifles, grenades, Stens, mitrailleuses and mortars, the Goumiers carry wicked-looking fighting knives, as sharp as a razor. Their drab jellabas make them completely inconspicuous on the barest mountain-side; their approach is as silent as night; and their zest in being legally entitled to cut an Italian's throat is obvious. They seem also to have acquired the art of throwing grenades quite a prodigious distance; and if they or their horses are killed, it is merely a matter of Mektoub—in other words, Allah has done it, not the accursed enemy.

"They are as tough as Pathans and proud as Conquistadors. They have the sense of the hunter, and each is a crack shot. No Goumier has ever been known to retire unless he is forcibly brought back by his superior, and prefers to fight individually, although his clan spirit teaches him to fight collectively as well." That is the summing-up of Captain X of the Fighting French, who has had very much to do with them on active service in the present war.

HOW THE GOUMS FIGHT, UNDER FRENCH OFFICERS, IN THE MOUNTAIN REGIONS OF TUNISIA. Attacking a German bivouac with knives and long bayonets—*Drawing by E. Byatt*

The Goums are native Moroccan warriors: all are volunteers, who were first organised by the French in 1912. Their great value in this campaign has come in patrol work and for sudden night attacks. Usually they are clad in jellabas (or loose, hooded woollen garments); they are objects of dread to the Italians. Each Goum receives 25 francs a day (the equivalent of 2s. 6d.)

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export

NEWS ITEMS FROM THE HOME FRONT

"WORKERS' PLAYTIME": Miss Gwen Catley singing to a vast audience of munition workers under the direction of the B.B.C.'s Variety Department: The British Broadcasting Corporation has always tried to help in the war effort. Soon after the beginning of the war, they took over a huge theatre from which many variety shows, such as "Music Hall" and "Happidrome," were performed. Blocks of tickets for these productions were then issued to the troops and munition workers. This policy was so successful that now two big theatres are in commission for these performances. But this idea did not embrace those munition workers right out in the heart of the country. For these the problem of transport was too great for a visit to the theatre studio, so a new idea was conceived. Two engineers set off in a van filled with outside broadcasting gear. They eventually found themselves in one of England's busiest factories, right in the heart of the country. They were taken to a shed that had not yet been fitted up for work. Two workmen were busily erecting an improvised stage at one end of the room. Twenty minutes before the show was due to start the hall was empty, but the minute the doors were opened the workers poured in. Their seats were allotted by ballot, the programme being relayed to their colleagues still at work in their shops. It was a tremendous success

AN ART SHOW IN A CATHEDRAL: Sponsored by the Board of Education, the Council for the Encouragement of Music and Art (by permission of the Dean) have just opened an exhibition in Chichester Cathedral: it is called "The Artist and the Church." Mrs. Joan Rodgers, in charge of the exhibition, is here hanging the pictures in the ancient edifice with the assistance of the Sacristan

A WILTSHIRE GIFT TO THE NATIONAL TRUST: Dinton Park and its mansion, presented by Mr. Bertram Philipps. The estate of some 200 acres overlooks the valley of the Nadder near Salisbury

REPAIRING THE BOMB DAMAGE TO BRITAIN'S OLDEST CHURCH: St. Martin's, Canterbury, damaged during the "Baedeker Raids," is now being repaired. It was built in the fourth century during the Roman-Christian period, and Ethelbert, King of Kent, was baptised there. The present font is believed to be the one in which the baptism took place. Services have been held at St. Martin's for thirteen centuries without a break. In this picture Civil Defence workers, who are carrying out the work during their spare time, are seen re-tiling the church roof

THE MANSION AT DINTON PARK: Until 1917 the seat of the Wyndham family, the house is beautifully proportioned, both inside and out. The National Trust announces that Mr. Bertram Philipps has presented to the Trust Dinton Park, of some 200 acres, together with the mansion and Hyde's House (formerly the Rectory House) and some cottages. The village of Dinton, where the Trust already owns Little Clarendon and other property, lies nine miles west of Salisbury on the Wincanton Road. The property stands prominently on rising ground facing south, overlooking the beautiful Nadder Valley, and is backed by a fine wooded ridge. The mansion, of local Chilmark stone, was designed by Jeffrey Wyatt in the neo-Grecian style, with portico and central lantern, and was completed in 1816. It is a house of remarkably beautiful proportions and architectural refinement both inside and out.

The World of Books—By Vernon Fane

CORRESPONDENCE and COMMANDOS, ADVENTURE and AMERICA

The Letters of a Studious and Humorous Englishman; Courtship and Commandos; A Macabre Picture of Post-war Europe; Lemmy Caution Once Again; An American History Book for Children

THE book that I have enjoyed above all others this week has been a collection of letters, written by an erudite, contemplative and humorous Englishman to the friend who has edited and annotated them. Though the writer remains anonymous, we learn a great deal about him from these witty and observant screeds; his tastes—he was a keen and adventurous student of botany; his musical preferences; his discerning eye for a good story as against gossip; his essentially civilised approach to every matter under discussion.

NO MUSIC IN PARTICULAR (Macmillan. 15s.) has been edited by Mr. Christopher Sandeman, to whom must go our gratitude for deciding on the publication of these letters, and our recognition of a delicate piece of work treated with distinction. Like his correspondent, who died recently at the age of fifty-eight, Mr. Sandeman has had an active interest in botanising, and many of the letters refer to his own discoveries in places as far apart as Portugal and Peru.

The book is infinitely quotable, but I will confine myself to two examples of the writer's quality. The first, I think, shows the strength and intransigence of his likes and dislikes, and the second the selective sense of his anecdotes.

Of a visit to Abbotsford, Walter Scott's home, he writes: ". . . never in my born days did I see so ghastly an abode. I felt immediately how right my instinctive dislike of Walter Scott had always been. There is the same atmosphere of the bogus and parvenu that one gets with Anglo-Catholicism, that gothic gush, that passion for unconvincing detail, which only makes the central claim more bleakly incredible. . . . So you may sit in a chair from Malmaison and contemplate the festoons of thumbscrews round the Landseers, while every inch of wall-space is covered with a mosaic of claymores, iron masks, and the keys of abbeys and gaols. It is depressing to see a very normal country family for ever crushed by the leavings of this terrible man."

Elsewhere he writes of lunching with a relation who was in "a glorious state of fuss," turning out the dining-room. "'We 'll have lunch in the kitchen, dear, because lunch in the drawing-room is against my principles.' I delighted her by saying that it was just like lunch on the stage during the first act of *Siegfried*, and that a bear might come in at any moment. And if only her London char, whom she calls Mime, 'because she always looks so put upon,' had been there, the effect would have been complete. B——— said, 'I 'd like to teach you to be a *Spartan*, dear, you 're like your poor father—there was always a *far-away foie-gras look* about him if you gave him anything that was *good* for him.' But she gave me a perfect little lunch, all the same."

Commandos to the left of you, Commandos to the right of you volley and thunder, and are meticulously observed in their arduous work by Mr. John Brophy. SPEAR HEAD (Collins. 9s. 6d.) is a pretty good novel when it sticks to the brave resourcefulness of the troops in action, and a pretty unconvincing one when it comes to the boy-and-girl idyll.

O'Donovan, a nineteen-year-old artist, distinguishes himself during a Commando raid in Norway. Back in England, he meets by chance Carol Blanchard, his captain's sister, and they fall in love. In the next Commando action, which is destined to destroy a radiolocation unit in Occupied France, O'Donovan and two other members of his force get left behind, and remain concealed in a cave for several weeks, scantily supplied with food by a Frenchman. They plan to escape to England in a boat that the Frenchman will bring, but as this help does not materialise, they decide to swim into the near-by harbour and steal some kind of craft under the eyes of the Germans. However, before they can do this they meet by coincidence a naval unit which is the foreguard of another Commando attack, and they are taken back to England. O'Donovan, with the help of a friendly newspaperman—the best drawn of a rather nebulous set of characters—gets in touch with Carol, and the book ends with the older man watching the boy's tired but ecstatic face as he speaks over the telephone to his girl.

As an account of Commando activities, this is competent and even exciting. As a romance of love and war it sadly fails to live up to the promise of the first chapter or two, and these disparities make it something less than a well-shaped novel.

THE MARY NEWCOMB PLAYERS, who have been entertaining the troops for three years

This talented company have been playing to soldiers for the past few years in a number of first-class productions. They are now touring the Welsh valleys, and have met with great success in the mining areas. The play they are presenting during the course of the present tour is Eugene O'Neill's "Days Without End," which has been described as a modern miracle play. It is interesting to recall that this was given a preliminary run at the Mercury Theatre, in West London. Whether a spiritual problem play of this character would appeal to Welsh mining audiences was thought by some to be doubtful: the play has, however, been followed with rapt enthusiasm in town after town. Miss Mary Newcomb (who plays the part of the wife) says that acting to Welsh audiences is a remarkable experience. With her in the group above are André van Gyseghem (on left) and John Trevor

THE NINETEENTH HOLE OF EUROPE (Secker and Warburg. 5s.) has been written by Mr. Vivian Connell in play form, but it is my devout wish that I never have to attend a performance of it, should some strong-minded impresario decide to produce it. Mr. Connell gives the reader what is evidently his conception of Europe after this war. He paints his picture in colours so sombre that by the last act one has the impression of sitting, if not in a darkened theatre, at least in a dark and thickly-haunted room.

Europe is ringed by fire and its waters mined by all the other Powers in the world with the intention—which seemed to me a fairly laudable one—of keeping its plague-ridden inhabitants to themselves. All hope, all health, nearly all food but an occasional grilled baby, has been taken from the Europeans, or from a handful of them who have not already died in madness and agony from an unspecified but particularly bestial form of the plague. In the shadows of this setting, a handful of characters who appear to represent royalty, big business, sport and, in one instance, a glimmer of sanity, play out their last painful days. In my young days this kind of thing used to be known as a "shocker." Whatever it is called now, it is not a bedside book.

When Mr. Peter Cheyney writes of a lady that "if I was in a train wreck with this baby I wouldn't even pull the communication-cord. I would just stick around an' sing Halleluiah until they brought along the ambulance," you realise that not only is the dame a lovely, but Mr. Cheyney is well into his story-telling stride. YOU CAN ALWAYS DUCK (Collins. 8s. 6d.) is another in the series of highly-coloured adventures which happen to Lemmy Caution, the American detective with the gangster methods, the fatal charm and the alarming capacity for hard liquor. Everything happens to Mr. Caution, as he is the first to tell you, with his usual relish. In the present book the tale of his exploits is as involved as ever, and as ever, he is the answer to that problem about the irresistible force meeting the immovable object.

It is in no critical spirit, since I am amongst Mr. Cheyney's most devoted admirers, that I recall the anecdote of a writer of adventure stories who was taken suddenly ill while half-way through a serial which was appearing in daily instalments. Editor, sub-editors, rewrite men, messenger boys, even a charlady, were called in to try to provide the next day's material, in which the hero had to be rescued from an impossibly dangerous situation. No one's ingenuity was equal to it. Summoned from his sick-bed, the author tottered in, took a sheet of paper, and wrote on it these inimitable words: "With one bound Jack regained his freedom." The situation was saved, and if Mr. Cheyney does the same kind of thing with a little more subtlety it is in the same tradition of classic self-confidence. Long may he continue.

Being an advocate of training the young idea from an early age, I saw with pleasure that the Oxford University Press have just produced a charming book for children, called THE LITTLE HISTORY OF THE UNITED STATES (7s. 6d.).

The history consists more of illustrations than text, and takes the child from the days of Christopher Columbus to the present years. The whole production has been imagined with great good taste and is worth more than a casual glance from even the adult reader. The book's end-papers are of a kind, certainly, that will delight child and grown-up alike: maps of that vast country, with distances and comparative rates of travel—i.e., Clipper or stage-coach—marked in.

THE RED CROSS AND ST. JOHN FUND

"Please Give More Than ever Before" is the slogan for the National Flag Day for the Red Cross and St. John Fund, to be held on June 8 in London, and in the counties on any convenient day about this time. As the war grows more intense and more widespread, the care of the wounded will make ever more pressing demands upon the Red Cross. Wherever there is a job for a Good Samaritan, the Red Cross and St. John Organisation is on the spot. Behind the battlefield, in the blitzed areas, among prisoners of war, their workers are always there, ready and equipped to perform their errand of mercy. Please give more than ever before this year.

The Shaftesbury Homes and "Arethusa" Training Ship

Teddie's father was called up for the Army, leaving him and his brother of four, for the mother had deserted. Teddie's elder brother stepped in temporarily until we could take him, but to-day he is happy, learning to be a good citizen. Please send a gift to this Centenary old work. Address: 164, Shaftesbury Avenue, London, W.C.2.

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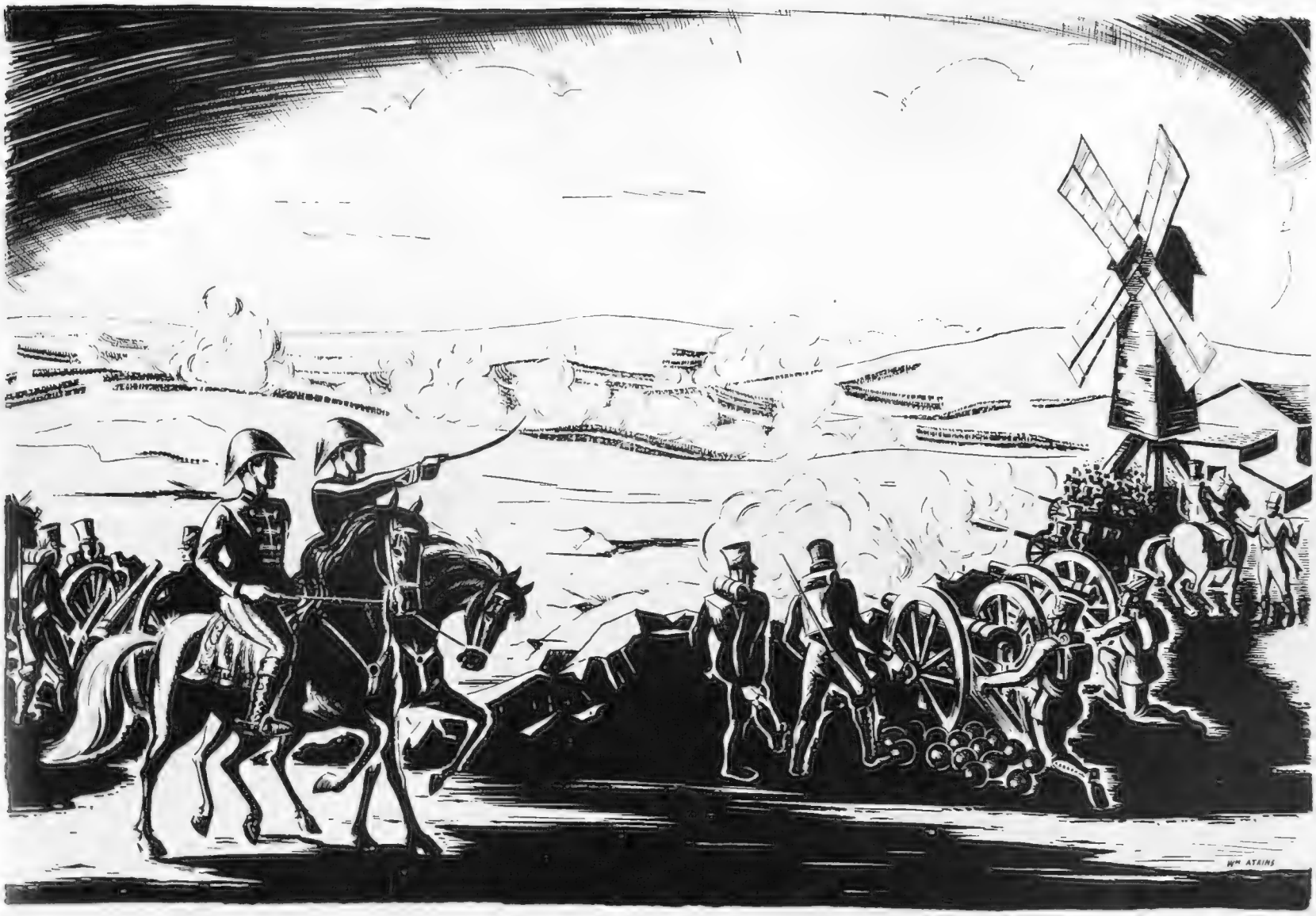

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All the better with the *'Zwow'* Pocket Placket Fastening.

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Scientific

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Vita-Weat is more than an excellent crispbread—it is a first-rate addition to your wartime diet, supplying you generously with many elements vital to health and fitness. Here is a quick guide to the goodness in Vita-Weat. It will help you to spend your points to the best advantage and to shop wisely:

VITA-WEAT CONTAINS:

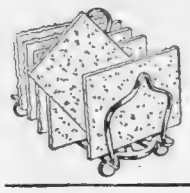
1 *Vitamin A to help you resist infection.*

2 *Vitamin D to help your body to absorb Calcium and Phosphorus, and to make sound teeth and bones.*

3 *The Vitamin B complex, comprising Vitamin B1, whose lack may cause neuritis and gastric disorders; Vitamin B2, which helps to burn up the 'fuel' foods and turn them into energy.*

4 *Iron to combat fatigue and anaemia.*

Vita-Weat is also excellent for the teeth. Children especially should have something crisp to eat every day.



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The AUSTIN MAGAZINE *may help you too—4d monthly from your newsagent* · THE AUSTIN MOTOR COMPANY LTD., LONGBRIDGE, BIRMINGHAM

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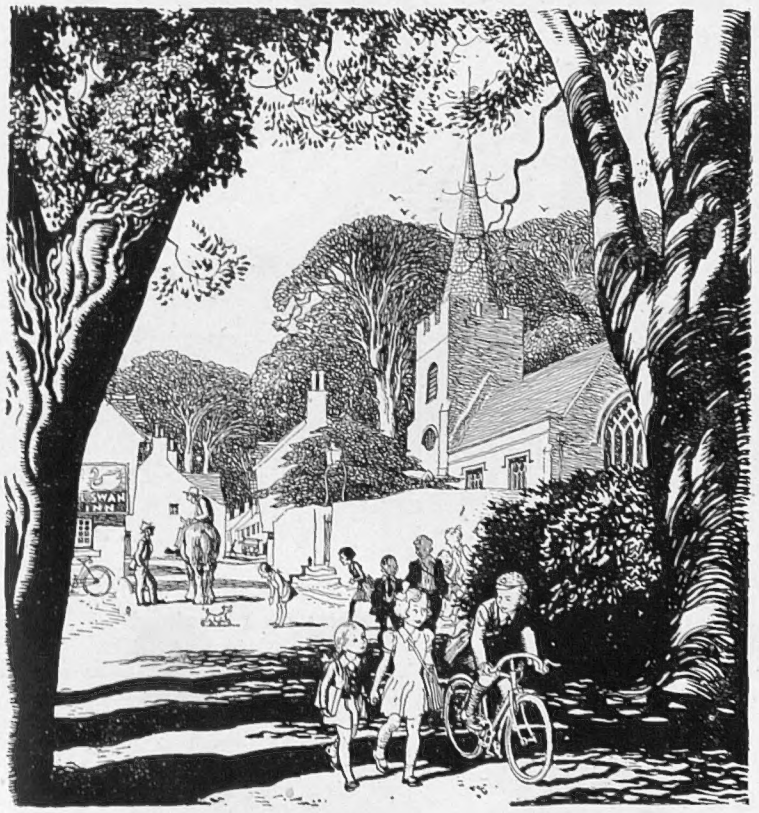


Children have a special claim to Horlicks

—please leave it for them

ONE REASON why Horlicks is scarce is that it is included in emergency rations supplied to sailors and airmen, who may have to live for many days without normal supplies of food.

Horlicks also goes to hospitals, to certain war factories, and to miners who are doing vital work under most trying conditions.

Nevertheless, some Horlicks is still being supplied to the shops. Please leave it for those who need it most. And make Horlicks by mixing it with water only. The milk is already in it.

HORLICKS

"My bottle's gone for the duration"

says OLD HETHERS

"No, madam, I'm sorry but I shan't be able to serve you with my Robinson's bottled Barley Water while the war lasts. In the meantime, madam, I'm sure I needn't remind you that you don't have to go without my barley water altogether. It's just a matter of going back to what we all used to do before Robinson's put up my barley water in bottles.

In those days we all made our barley water from Robinson's 'Patent' Barley, and that's what we're doing today. Flavour? Well, that is a bit of a problem, but a little ingenuity will help to solve that. The juice from stewed or tinned fruit is an excellent substitute for lemon and some people use a little honey or jam. If you have any other ideas, madam, I hope you'll be sure to let me know. My address at Norwich is on the tin."

Barley Water *made from*

ROBINSON'S

'PATENT' BARLEY

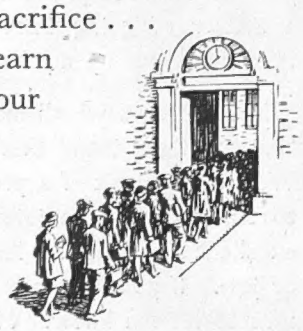
CVS—12

This perseverance

The *whirr* and *clang* of machinery are now her daily serenade; her brain and fingers, skilled by constant repetition, work at lightning speed; the hours, days, weeks, months, wear on. (Every hour, she thinks, is one hour nearer to the war's end, one hour nearer to victory.) We can't *all* work in munition factories. But we *can* all bring this quality of perseverance to our own war jobs—this quality of steadfastness in pursuit of our aim, however monotonous our work, however seemingly trivial . . .

For this is the spirit that *wins through*—the quality that is akin to, and as vital to victory as, the more spectacular virtues of daring, courage, and self sacrifice . . .

This is the spirit that will earn for patient workers, as for our gallant fighting men, the wonder of the future: "*But for them, in the time of their country's need . . . ?*"



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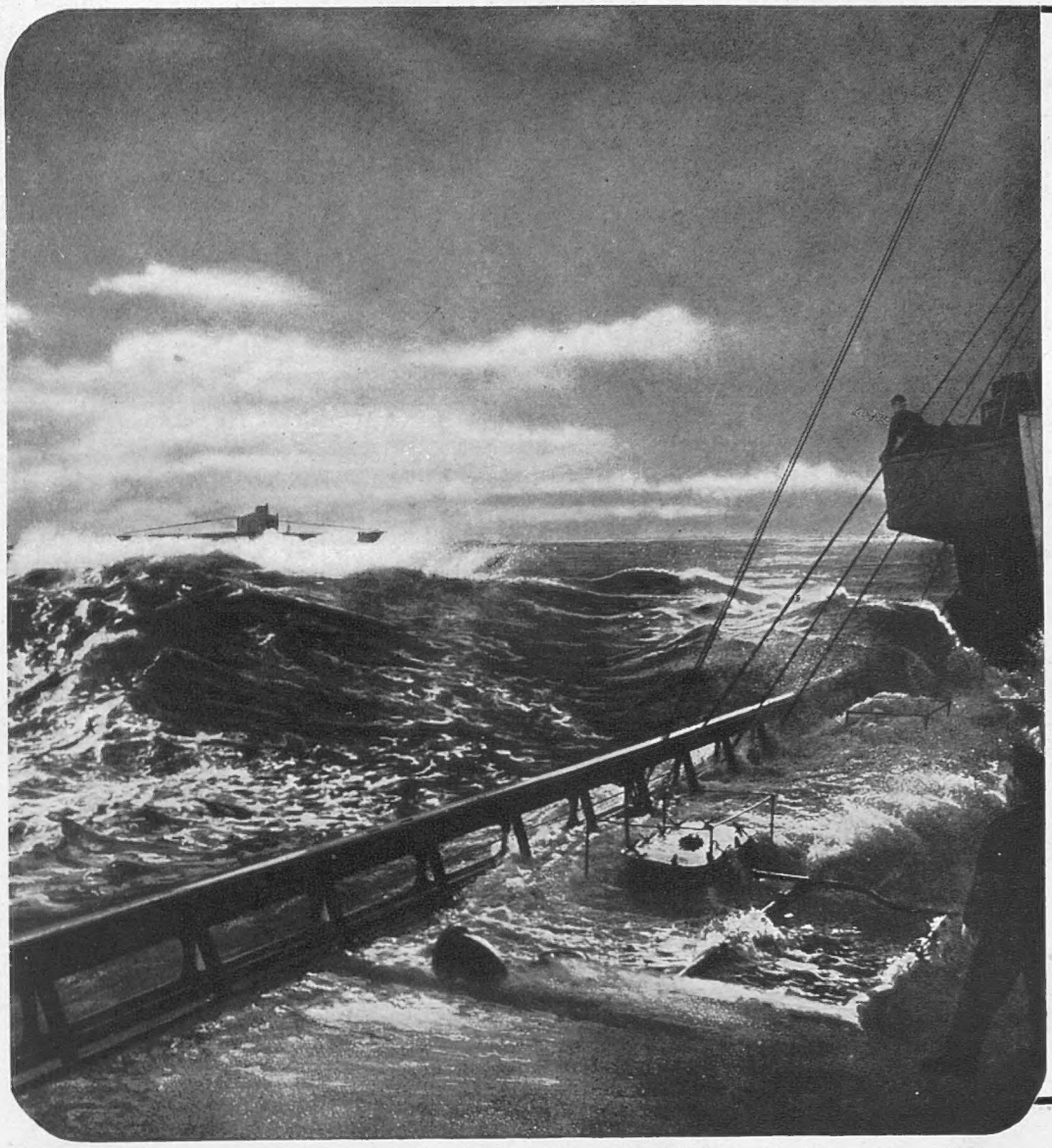

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This is a message of grateful acknowledgement to the Royal Navy, the Merchant Navy, and all those who go down to the sea in ships, for the risks they run in bringing their precious cargoes to these shores. Once here it is our bounden duty to see that they are not wasted.

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AND THE PENNY DOESN'T FALL!

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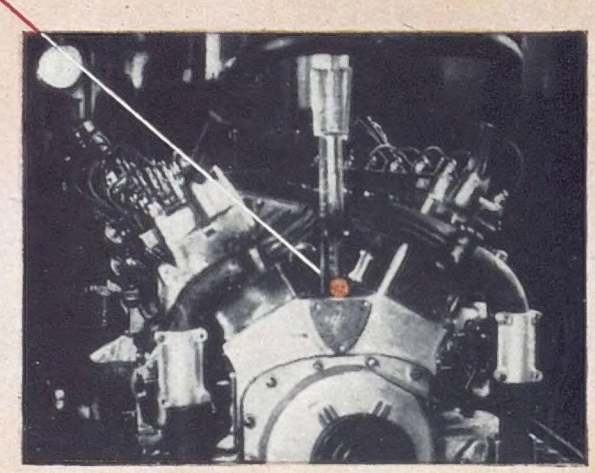

This is the photograph—unretouched—of the penny standing firmly on its edge while the powerful Daimler engine runs with unsurpassed smoothness. Note also the glass of water balanced on a tube—on the running engine!

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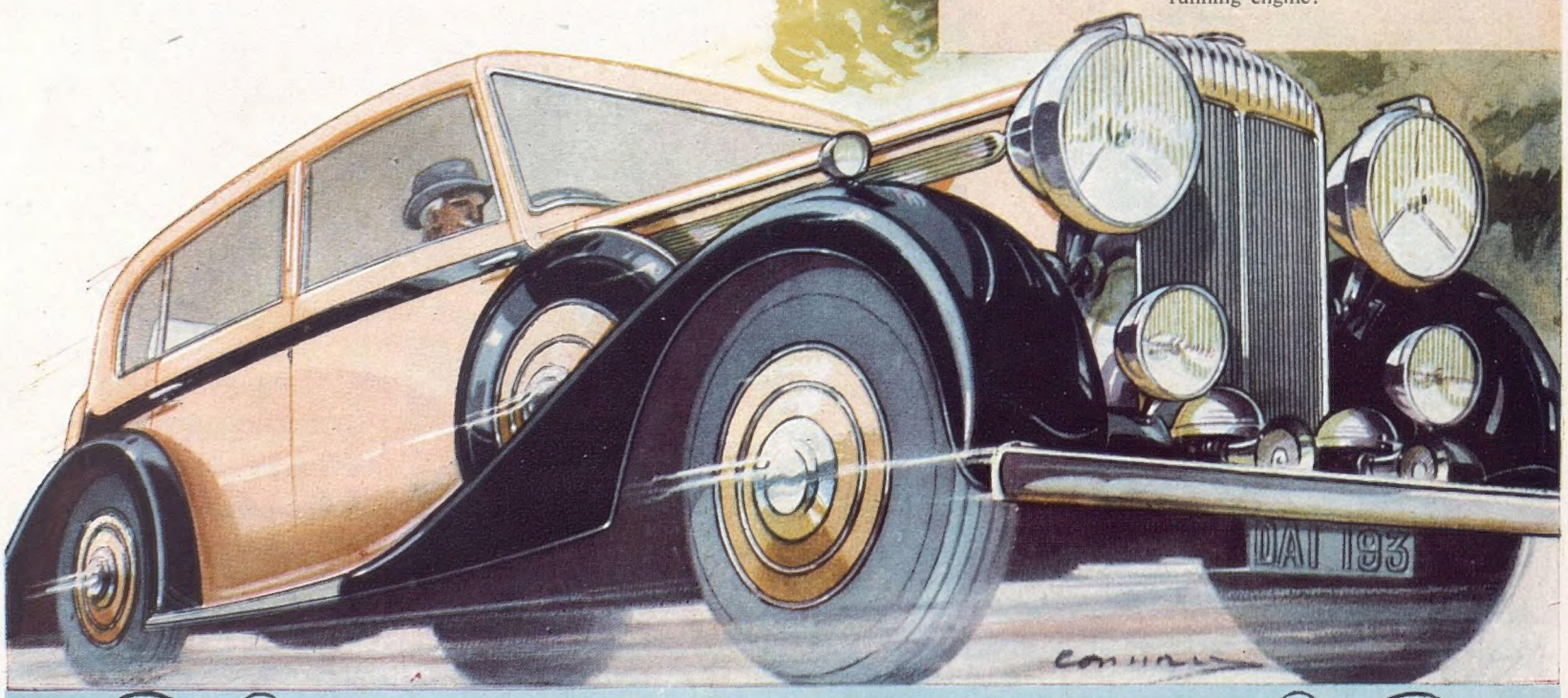

Daimler

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